Information Package for Manufacturers/Importers submitting information on Existing Chemicals in conformity with Article 3 of the Council Regulation on the Evaluation and Control of the Risks of Existing Substances

This Information Package contains the following elements.

1) An introductory note explaining the legal context and certain practical and administrative details.

2) A computer diskette known as the HEDSET (Harmonised Electronic Data Set) which contains the software which manufacturers/importers must use when compiling and preparing the information to be submitted under the Council Regulation.

3) The HEDSET manual which contains technical information on the use of the HEDSET : how it should be installed, how to create export files, how to print files, etc, etc.

4) The HEDSET explanatory note which explains how information should be introduced into the HEDSET. The explanatory note is complementary to the extensive glossaries and help facilities which are available within the HEDSET programme.

5) An additional page with the Commission address to which the diskettes containing the HEDSET data should be sent. As foreseen in the Regulation the Commission will only accept data submitted on diskette and created using the HEDSET. The data for each substance on which a manufacturer/importer submits data should be submitted on separate diskettes, ie one substance per diskette.

6) A declaration to be completed and signed, and submitting along with the diskettes.

Data Collection in Compliance with the Requirements of Article 3 of the Council Regulation on the Evaluation and Control of the Risks of Existing Substances

Introductory Note

Legal context

The Council Regulation on the Evaluation and Control of Existing Chemicals establishes a common mechanism for the systematic collection and evaluation of data on existing chemicals across the European Community. The term "existing chemicals" refers to any chemical substance which is on the European Inventory of Existing Commercial Chemical Substances (EINECS). EINECS was published in the Official Journal of the European Communities on 15 June 1990, (Official Journal, C146A, Volume 33), it contains over 100,000 entries.

The scope of the Council Regulation covers all chemical substances on EINECS. However, the present information package is concerned only with the obligations placed upon manufacturers and importers under Article 3 of the Regulation. Information and advice concerning the other data collection measures foreseen under the Regulation will be published at a later date.

The two phases for data collection foreseen under Article 3 of the Regulation:

Phase 1 - Within 12 months of the entry into force of the Regulation
Any manufacturer who has produced, or any importer who has imported, a substance specified in Annex 1 to the Regulation either on its own or in a preparation and in quantities exceeding 1 000 tonnes per annum, at least once in the three years preceding the adoption of the Regulation or in the year following its adoption, must submit data within 12 months of the entry into force of the Regulation.

Phase 2 - Within 24 months of the entry into force of the Regulation
Any manufacturer who has produced, or any importer who has imported a substance on EINECS but not on the Annex 1 to the Regulation, either on its own or as a preparation in quantities exceeding 1 000 tonnes per annum at least once in the three years preceding the adoption of the Regulation, or in the year following its adoption, must submit data within 24 months of the entry into force.

What data are to be submitted

The data to be submitted are those specified on the HEDSET. HEDSET has in turn been based on Annex III to the Regulation.

It is very important to note that Article 3 of the Regulation requires manufacturers/importers to make all reasonable efforts to obtain and then supply existing data relating to the properties of the substance. However, in the absence of information, manufacturers and importers are not required to carry out testing in order to generate the missing data. Certainly, for those cases where missing data would require animal testing, manufactures/importers are discouraged from carrying out additional testing.

Co-operation between submitters

All manufacturers/importers required to submit data in phases 1 and 2 of the programme must submit the information required in Section 1 of the HED-SET, the so-called producer/importer related part. This section contains information which is specific to each submitter as well as potentially confidential data. However, for sections 2, 3, 4 and 5, the so-called substance related part of the HEDSET, submitters may collaborate to develop an agreed data set. This data set could then be submitted by one or more of the collaborating parties. However, it is recommended that the complete HEDSET is submitted only by one of the collaborating parties. Then, the other manufacturers/importers taking part in this collaboration should complete and submit part 1 of the HEDSET and indicate in it that the parts 2, 3, 4 and 5 have been submitted by the importer/manufacturer "x" on their behalf.

How are data to be submitted

Data are to be submitted using the HEDSET software included in this information package. Please note that data will not be accepted by the Commission in any other form than on a computer diskette and compiled and produced using the HEDSET programme.

Each diskette sent to the Commission should contain information on no more than one substance ie one substance per diskette.

When diskettes are submitted they must be accompanied by the declaration form (completed) to be found in this information package.

To whom should diskettes be submitted

Diskettes should be sent to the Commission at the following address :

Security Office
c/o Mr. A. DAVID
Building 5 L
Joint Research Centre
Commission of the European Communities
I-21020 ISPRA (VA)
Italy

All packages should carry the indication : "HEDSET" .

Some Member States may also require, when manufacturers/importers submit diskettes to the Commission, that they simultaneously send a copy to the relevant national authorities. Manufacturers/importers should contact the national authorities for further information on this point.

Once diskettes are received by the Commission in Ispra they will be checked and validated. If your diskette is received and processed successfully you will receive an acknowledgement of receipt and successful processing. If your diskette cannot be processed it will be returned to you with comments. As the Existing Chemicals Unit in Ispra will be processing many thousands of diskettes, it is probable that you may need to wait several months for an indication that your diskettes have been successfully processed. Please be patient!

HEDSET "Help Desk"

If manufacturers or importers encounter problems in trying to use the HEDSET the Existing Chemicals Unit in Ispra will operate an Help Desk facility.

The contact details for the Help Desk are :

HEDSET Help-Desk
Existing Chemicals Unit
Joint Research Centre
Commission of the European Communities
I-21020 ISPRA (VA)
Italy

Tel : (39) (332) 78 58 66
Fax : (39) (332) 78 58 62

The OECD Existing Chemicals Programme

The reason we use the name "Harmonised Electronic Data Set" is because the HEDSET can also be used to submit data in the context of the OECD Existing Chemicals Programme. This decision was taken in order to avoid duplication of effort and to facilitate the transfer of information between the EC and OECD Existing Chemicals Programmes. For this reason you will find a number of fields in the HEDSET which are exclusively for use in the context of the EC programme and others which are exclusively for use in the OECD programme.

Declaration Form to Accompany all HEDSET Submissions in the Context of the Council Regulation on the Evaluation and Control of the Risks of Existing Substances

I,

Name :

Position in company :

Company name :

Company address :

do hereby submit the data on the chemicals indicated in the Annex to this declaration in fulfilment of the obligations placed upon this company under Article 3 of the Council Regulation on the Evaluation and Control of the Environmental Risks of Existing Substances and in accordance with the procedures established by the Commission of the European Communities under Article 6 of the same Regulation. The data hereby submitted are on computer diskette(s) and have been compiled according to the HEDSET software provided by the Commission; there is one diskette for each substance specified in the Annex.

Signature Date

Contact point in case of technical problems:

Name :

Address :

Telephone :

Fax :

Annex 1 to Declaration
List of Substances for which Data are Submitted

DA : Disketten med HEDSET-dataene sendes til Kommissionen på følgende adresse:

DE : Die Disketten mit den HEDSET-Daten sind an folgende Anschrift bei der Kommission zu senden:

EL : Οι *δισκέτες που περιέχουν τα δεδομένα του* HEDSET *πρέπει να αποστέλλονται στην Επιτροπή στην ακόλουθη διεύθυνση*:

EN : The diskettescontaining the HEDSET data should be sent to the Commission at the following address:

ES : Los disquetes conteniendo los datos HEDSET deben ser remitidos a la Comisión a la seguiente dirección:

FR : Les disquettes contenant les données HEDSET doivent être envoyées à la Commission à l'adresse suivante:

IT : Il dischetto contenente i dati HEDSET deve essere inviato alla Commissione al seguente indirizzo:

NL : De diskettes met de HEDSET gegevens dienen naar de Commissie te worden verzonden, en wel op het volgende adres:

PT : As disquetes que contêm os dados HEDSET devem ser enviadas à Comissão para o seguinte endereço:

Security Office
c/o Mr. A. DAVID
Building 5 L
Joint Research Centre
Commission of the European Communities
I - 21020 ISPRA (VA)
Italy

DA : Al post bedes mærket "HEDSET".

DE : Auf allen Verpackungen ist "HEDSET" anzugeben.

EL : *Όλοι οι φάκελοι θα πρέπει να φέρουν την ένδειξη* "HEDSET".

EN : All packages should carry the indication: "HEDSET".

ES : En todos los paquetes debe figurar la mención "HEDSET".

FR : Tous les envois doivent porter la mention: "HEDSET".

IT : Ogni pacchetto dovrà recare la dicitura: "HEDSET".

NL : Op elke verpakking dient de vermelding "HEDSET" te worden aangebracht.

PT : Todas as embalagens devem vir identificadas com a indicação "HEDSET".

H E D S E T

Manual

Harmonized Electronic Data Set for the Council Regulation on the Evaluation and Control of the Risks of Existing Substances and the OECD Existing Chemicals Programme

Contents

Are you familiar with HEDSET ?

If you are not already familiar with HEDSET then please read this manual carefully.

Before you begin

You must install the HEDSET programme correctly on your PC. See Chapter 4. (HEDSET can only run with a MS-DOS version of 3.3 or later versions).

What does HEDSET offer you?

1. Data entry of chemical substances via a screen menu

2. Creating a print file

3. Creating an export file for the Council Regulation on the Evaluation and Control of Existing Substances and the OECD Chemicals Programme.

General remarks

All data and text to be entered are printed in bold and italics, for example: ***KEYB***. If a particular command is requested this is given between the brackets < >, for example: <**ENTER**>.

1. Data entry

1.1. Running HEDSET

Before you can run the HEDSET programme you must change to the directory where HEDSET is installed (e.g. C:***cd HEDSET*** <**ENTER**>).

1. C:\HEDSET>***HEDSET*** <**ENTER**>

2. When you first run HEDSET, various internal programmes are initiated and take a while to run. This procedure does not occur for subsequent entries.

3. Each time you start HEDSET the system's data banks will be generated, and subsequently the CAS-Number must be entered **twice** in order to identify the substance, for example

   67-66-3 <**ENTER**> or ***67663*** <**ENTER**>
   67-66-3 <**ENTER**> or ***67663*** <**ENTER**>

   Please check the CAS-Number carefully, before pressing <**ENTER**> as it cannot be subsequently changed.

4. For every new substance i.e. a different CAS-Number a new data bank along with relevant data indexes will be set up, and then the first chapter screen follows.

1.2 System structure

The data entry system of HEDSET consists of 5 main chapters, e.g. Physical-Chemical Data, divided into a total of 67 sub-chapters, e.g. vapour pressure. Each has its own screen and numbering.

1.3 Screen layout

After the initial screens and inputting of the CAS-Number for a substance you will see three different screen sections:

- substance information with EINECS-Number, CAS-Number, IUPAC-Name, and the source of the data set together with the file creation date.

- data window with chapter number, chapter heading, record number, number of records in the current chapter and the CAS-Number.

  (In most of the chapters there is also information concerning the last update and whether any free text has been entered.)

- Help line and purpose of the function keys (bottom of the screen)

1.4 HEDSET functions

After entering the CAS-Number for a substance the menu for the first chapter "Substance identification" appears on the screen and the first entry field is highlighted (IUPAC-Name).

The choice of individual fields is made with the cursor or the "ENTER" or "TAB" key. Some fields must be completed before you can proceed. The different functions of HEDSET can be selected with the function keys, for example F1 to F10. For the particular field which is chosen the function keys, which are coloured gray on the screen or not shown at all, are not available.

Selecting individual fields

Keys	**HEDSET function**
ENTER or TAB	confirms field entry and selects next field
Shift TAB	confirms field entry and selects the previous field
ESC	interrupts actual activity or exits HEDSET
INSERT	switches between overwrite and insert mode for data entry
DEL	deletes the characters at the cursor
BACKDEL	deletes character left of the cursor

ARROW UP	selects the field above
ARROW DOWN	selects the field below
ARROW LEFT	selects previous character in a field
ARROW RIGHT	selects following character in a field
PAGE UP	selects the first field
PAGE DOWN	selects the last field
HOME	selects the first character of a field
END	selects the last character of a field

Function keys in data entry mode

Function	Key	HEDSET function
Glossar(y)	F1	opens glossary window, if available for the chosen field
Chapter	F2	saves data and returns to the chapter menue for selecting chapters
SaveRec	F3	saves data
JumpRec	F4	selects another record, if available
NewRec	F5	creates a new record
Freetxt	F6	initiates free text entry mode
DelRec	F7	deletes the data of the chosen record
CAS-No	F8	switches to another CAS-Number to be entered
Exp/Imp	F9	creates an export/import file
Print	F10	creates a print file which can be printed under DOS or incorporated into your word processing programme
Memorystatus	ALT + M	shows available working memory
Systeminfo	ALT + S	shows system information
Del/Trans	ALT + X	deletes a field entry and transfers it to "scrap" (informatics terminology for temporary storage)

Copy	ALT + C	copies a field entry to scrap
Move	ALT + V	moves scrap content to a chosen field (also possible to move between different chapters)
Copy	ALT + W	copies complete record to scrap
Replace	ALT + E	replaces a record content with the scrap entry (only possible within same chapter)
Undo	ALT + U	undoes field entry changes

Function keys for the **free text mode** after pressing F6

Txttype	F1	opens the glossary window for free text types
Deltext	F7	deletes a free text entry
Copy	ALT + C	copies a free text to scrap
Move	ALT + V	moves scrap content to chosen free text field (also possible to move between different chapters)
Copy	ALT + W	copies all free texts of a record to scrap
Replace	ALT + E	replaces the free text with the copied free texts in scrap (also possible to be used between different chapters)
Undo	ALT + U	undoes free text changes

Function keys in free text entry mode

Editkey	F1	displays edit facilities
SaveTxt	F3	saves text and quits text entry mode
DelLine	F7	deletes a line of text

1.5 Type of data

Numeric and alphanumeric data can be entered into the HEDSET fields. Although some are numeric only. The character fields can accommodate up to 240 characters. Fields defined as "free text fields" are entered via free text entry mode (F6). Each chapter (except 1.01 - 1.03) provides the facility for entering data for a given substance in subsequent records by using the F5 key. The different records will either be registered one below the other in multi-row blocks for records containing only one line (e.g. in chapters 1.2 or 1.3) or separately one record after the other.

1.6 Selecting a chapter

By pressing **the <Chapter> key (F2)** data on the screen is saved and the chapter menu appears. The cursor remains on the chapter which is still open. The selection of a new chapter can be done using the arrow keys and then pressing **<ENTER>**.

Chapters 1.01 to 1.04

These chapters contain information about substance identification, the manufacturer, importer, Sponsor Country and SIDS Contact Point (*). The CAS-Number field cannot be changed because this number is a unique identifier for a substance when starting HEDSET. In chapter 1.01 "Substance identification" an entry in the field "IUPAC-Name" is always required; in cases, where a IUPAC-Name does not exist, e.g. for UVCB substances, the chemical name laid down in the EINECS should be entered here. After having completed the chapter "Substance identification", pressing the chapter function key (F2) will automatically result in the chapter 1.02 "ID of diskette submitter" appearing on the screen. This is deliberate because the company submitting the data must be clearly identified. If the company data are already stored in the memory, they can be transfered to the current data set to complete the first part of this chapter. Once having completed the chapter "ID of diskette submitter", pressing the chapter function key (F2) again will take you into the menu for the various chapters.

In the chapter 1.02 "ID of diskette submitter", the name of the company must always be entered. On leaving this chapter you will be asked if you wish to save the company data in a specific file. If you do this then it will be not necessary to enter the same data again for another substance from that company.

When you use HEDSET for the first time, there will be a further question on the screen asking if you wish to save the whole chapter on company information. In order to use this information as a default value, it must be saved. It will then be read automatically.

(*) Sponsor Country and SIDS (Screening Information Data Set) are terms used in the context of the OECD Existing Chemicals Programme.

The HEDSET programme takes into account the possibility of submission of a common data set by several companies. Chapter 1.02 allows therefore two options: either you submit the complete data set or you submit only chapter 1, that means all subchapters 1.01 - 1.10, of the HEDSET whilst chapters 2 - 5 are submitted by another company on your behalf.

Therefore, within chapter 1.02 you will be asked to answer the question:

"Has the complete Data Set already been submitted by another manufacturer or importer?"

If the answer to this question is "yes", then you will not have access to chapters 2 - 5; chapter 1.03, "ID of submitter of full HEDSET", will then be accessible to you and should be completed.

If the answer is "no", then you will not have access to chapter 1.03 but chapters 2 - 5 will be accessible to you and should be completed.

Similarly for petroleum products, the compiler of a reduced data set (chapter 1) should answer the question for the submitter of the complete Data Set in chapter 1.02 with "yes" and should enter the required data on the company, which is submitting the complete HEDSET, in chapter 1.03. For those substances the group number should be entered in chapter 1.01!

For entering the name of the company in chapter 1.03 you can either type the name or use the glossary . The glossary will appear in a window towards the top left hand corner on the screen after pressing <**Glossary**> (F1). It contains all companies, that are saved. If a company name is typed that is different from those in the glossary, the glossary window will appear on the screen. You can either select one of these companies or you can confirm the name typed by pressing <**ESC**>. After leaving the chapter you will be asked if you want to save these data .

Chapter 1.04 "OECD and Company Information" contains information of sponsor country and SIDS Contact Point or information on cooperating companies. E.g. the participants who are cooperating to submit a common data set should be identified here, except for the diskette submitter and the submitter of the complete HEDSET, who are already identified in chapter 1.02 or 1.03.

1.7 Field data entries

After selecting a chapter the chapter screen with accompanying fields will appear and the cursor will be positioned on the first entry field. In some chapters with only free text fields, a dummy field will appear (e.g. 1.9 "Source of exposure"), and you must press F6 to initiate data entry.

Help line

Every field has a help line which appears at the bottom of the screen when you enter that field. The help lines suggests the type of data to be entered. In the case of numeric fields the range of acceptable values will be given.

If the help line starts with a (G) then this field can only accept special terms, the so-called glossary terms. All other entries will be refused. You cannot leave the field if there is an incorrect entry.

Data entry facilities

As mentioned above, some fields will only accept glossary terms.

1. **Entry using the glossary**

   First open the glossary window:

   a) press **F1**
   b) position cursor over desired term
   c) press **<ENTER>**.

   If you wish to leave the glossary window without selecting a term, press **<ESC>**.

2. **Direct entry of terms**

   If you wish to enter a term directly then type the term in the field.

   Example: for the field scope, when entering values the terms are:

   =, >, > =, <, < =, *ca.*

   and you may find it easier to type, e.g. "=", than go through the glossary procedure.

   When terms are directly entered, the glossary window will appear automatically if the term does not exist or there is a typing error.

3. Terms not found in the glossary

It is possible to include other terms not found in the glossaries. To do this:

a) check if there is the term "***other***" in the glossary
b) if yes, then type in your new term as follows:
OTHER: XXYYZZ **<ENTER>**.

Make sure you pay attention to the correct typing:

after ***"OTHER"*** there must be colon (:) and a space after the colon.

If this is correctly typed then the desired term will be accepted.

If "other" does not exist in the glossary then the entry of this data is not possible (you must therefore choose another acceptable term from the glossary).

Numerical fields

You can only enter numerical values and leave the field if the value is within the range given at the bottom of the screen.

Editing fields

Using the cursor you can make any necessary changes to the field in question. With the insert function you can switch from overwrite to insert mode and vice versa. You can identify the mode in use by the different size of the cursor and the words "Over" or "Insert" at the bottom on the screen on pressing the insert button.

Some fields are actually longer than what is shown on the screen. The field will then scroll in both directions.

HEDSET offers the following possibilities to enter and update the fields:

1. Enter the desired term and press **<ENTER>** or **<TAB>**. The inputted term will be accepted and the cursor jumps to the next field.

2. With **<SHIFT><TAB>** the cursor jumps to the previous field;

3. With the **<ARROW UP>** or **<ARROW DOWN>** the fields above and below can be selected;

4. With **<PAGE UP>** or **<PAGE DOWN>** the cursor jumps to the first or last field of the sub-chapter.

Working with the scrap

If identical entries are required in different fields, they can be copied to a scrap, then transfered from the scrap to the desired field. By pressing the corresponding keys on the chosen field the following functions are available:

<ALT> + <X> the entry in the chosen field is deleted and transfered to the scrap; "F" appears in the bottom right hand corner of the screen;

<ALT> + <C> the entry in the chosen field is copied to the scrap and "F" appears in the bottom right hand corner of the screen;

<ALT> + <V> the entry in the chosen field is replaced with the scrap content;

<ALT> + <W> all entries in the chosen record are copied to the scrap and "R" appears in the bottom right hand corner of the screen;

<ALT> + <E> all entries in the record are replaced with the content of the scrap.

Attention!
This function can only can be used within the same chapter and is not applicable in chapters with "multi row" records (e.g. chapters 1.2 "Synonyms" or 1.3 "Impurities").

<ALT> + <U> The field entry changes made by using the scrap-function are undone.

Attention!
This function only is applicable immediately after using the scrap-function!

Free text fields

Some data sets may require additional information which cannot be entered into the standard fields. Free text functions must then be used (max. 5 Kb per free text field).

Free text functions

With regard to data entry in free text mode you must first select <**FreeTxt**> (F6). The screen then shows two columns, the left column contains the code of the free text type and the right column, the first line of any free text stored.

The free text type has the following functions:

1. guide to the different kinds of free text, e.g; RE for the reference of the data

2. free text information on the chapter screen

A maximum of 11 free text entries per sub-chapter is possible.

The type and number of free text entries are visible on the screen, for example **RE:2** refers to two separate references for the same chapter.

Creating and reading free text entries

After pressing the free text function **(F6)** the free text mask appears and the code of the free text type can now be directly entered, or selected by using the glossary function key <**Txttype**> (F1). Choose the appropriate code with the arrow keys and press <**ENTER**>. The text entry window will appear and you can then type your text.

With <**Editkey**> (F1) you can view the available functions.

With <**DelLine**> (F7) you can delete a line of text which is then not recoverable.

To save your text press <**SaveTxt**> (F3); in doing so you leave the text entry mode. Any changes to a text can be cancelled if you press <**ESC**> which quits the text entry mode and asks if you are certain.

To delete a free text entry press <**DelTxt**> (F7).

If the text has already been saved you will be requested to confirm the deletion. If the text has not been saved then the text will be deleted immediately.

To leave the free text mode press <**ESC**>.

Copying free texts by working with the scrap

If identical free texts, e.g. references of test studies, are required in different records, sub-chapters or main chapters the free text can be copied to a scrap, then transfered from the scrap to the desired record, sub-chapter or main chapter. By pressing the corresponding keys on the chosen free text field the following functions are available:

<ALT> + <C> the chosen free text is copied to the scrap and "T" appears in the bottom right hand corner of the screen;

<ALT> + <V> the free text in the scrap is moved to the chosen free text field; if the chosen free text field already contains an entry, this entry is then replaced;

<ALT> + <W> the complete set of texts in a free text field of a record is copied to the scrap and "T" appears in the bottom right hand corner of the screen;

<ALT> + <E> all entries in the free text field of a record are replaced with the free texts in the scrap;

<ALT> + <U> all free text changes made by using the scrap- function are undone.

Attention!
This function only is applicable immediately after using the scrap-function!

1.8 Saving data

Data which are entered in a chapter, will be saved automatically when you leave the chapter (F2). You can also do this by pressing <**SaveRec**> (F3), whenever you want to.

1.9 Creating a record

If it is necessary to create a new record in a chapter to lay down additional data, e.g. results from further tests, then you can do this by pressing <**NewRec**> (F5). A new data screen is then opened to allow entry of the data. The record number and the total number of existing records within that chapter will be shown towards the top right hand corner of the screen.

The first number of each pair represents the ID number of the record, the second number represents the total number of records within this chapter. The ID number once given to a record, remains unchanged even if a record is deleted, e.g. after deletion of record 5 from a total number of 8 records, the remaining 7 records will be numbered by using digits in this way: 1/7, 2/7, 3/7, 4/7, 6/7, 7/7, 8/7.

1.10 Selecting a record

If more than one record is available in a given chapter, then you can access these with the key <**JumpRec**> (F4). Select the desired record and type the record number which then appears at the top right hand of the screen, or use the "+" and "-" signs to make the desired selection. Confirm your selection by pressing <**ENTER**>.

1.11 Deleting a record

The current record within a chapter can be deleted by pressing the key <**DelRec**> (F7). If the contents of the record are already saved then you are asked for confirmation. Once deleted these data are not recoverable.

1.12 Introducing new substances

If you wish to enter data on a different substance then press <**CAS-No**> (F8). An entry window will appear requesting the CAS-Number. Enter the new CAS-Number then press <**ENTER**>.

2. Data Export/Import

In order to submit data under the provisions of the Council Regulation on the Evaluation and Control of Existing Substances and the OECD Programme of Existing Chemicals or to interchange them with other HEDSET users, all HEDSET data must be exported to a special format file. This format file can then be read by the European Commission, by the OECD or by other users for further processing. If the procedure is reversed, data can be read by HEDSET using the import function.

2.1 Creating an export file

After pressing the **<Exp/Imp>** (F9) key the system will ask you to select to create either an export file or to import one.

If an export data file already exists for the substance, then you will be asked if you wish to overwrite the existing file. If yes, the old file will be overwritten otherwise the command will be cancelled.

2.2 Submitting data to the European Commission and the OECD

Once you have created the export file for the substance in question, please copy the file to an empty **MS-DOS formatted diskette (either 5.25" or 3.5")**.

Note

Please note that there must be **only one substance (one CAS-Number) export file per diskette !!!**

2.3 Data Import

Importing data is carried out by using the function key **<Exp/Imp>** (F9). You will be asked if you wish to export or import data (see above). The import function will request the drive and the path from which data will be transfered. If you have e.g. file 50000.EXP (export file formaldehyde) on diskette, after entering the drive (A: or B:) and the name of the path and then pressing <ENTER>, a window appears on the screen showing the identity of the export file on the diskette, in this case 50000.EXP. This file is selected for import by pressing <ENTER>. If several export files (*.EXP) exist, they are shown as a list, from which the desired file can be selected.

Furthermore you must enter the CAS-Number under which you wish to import the data. If a file with the same CAS-Number already exists then you will be asked if this file can be replaced by the new import file. If this is the case then the import will start. The whole data file (with the exception of the company information part, see below), will be imported. That means, that in cases of collaboration of several companies for providing a common data set (see chapter 1.6, p. 8), a basic data set should be sent - preferably by the submitter of the complete HEDSET - on diskette (export file) to a second company for adding missing data, then to a third company and so on. Inserting data to an incomplete data set by importing the corresponding export file is not possible with the HEDSET programme!

The company information part (chapters 1.02 or 1.03) of the imported file is not transfered to the second company. If there are company data saved as a default value in the HEDSET programme of the importing company (= second company), then these data will be linked to the transfered data. Company data of the exporting company can be transfered, if desired, within chapter 1.04 "OECD and Company Information".

3. Printing facilities

3.1 Creating a print control file

After pressing the <**Print**> (F10) key an ASCII data file is generated which contains all the data of the substance in question. This file will be named as "CAS-No." PRT. To create this print file, it is necessary to have the "Print Control File" (e.g. HEDPCF.GBR for the English version with country code GBR). This "Print Control File" creates a print file nearly identical to the screen presentation.

The following printing options are available:

1. A structured print out without pagination can be obtained under MS DOS by the following commands:

   C:\> ***cd HEDSET*** <ENTER>

   C:\HEDSET> ***PRINT CAS-No.PRT*** <ENTER>

   e.g. ***PRINT 50000.PRT*** <ENTER>

   After entering the printer port in answering the corresponding question on the screen - e.g. LPT1, LPT2, COM1, COM2 or other, depending from hardware configuration or printer used - the data set is printed.

2. The print file can be loaded to a word processing programme. If a more structured print out is wished, then you can format and edit the data set before printing. For loading the print file you should follow the instructions for loading to your word processing programme.

3. A more structured print out can also be obtained by adapting the "Print Control File" to a desired, individual form.
   Making changes to the "Print Control File" is only recommended to experienced PC users! The description of the PCF structure is given in Annex 1.

4. Installation of HEDSET programme

Before you start the HEDSET install programme HEDINST.BAT you should notice the following important points.

4.1 Hardware requirements

- PC AT (100 % IBM compatible)
- MS-DOS Version 3.3 or higher
- EGA or VGA graphics adapter to support the right codepage
- Floppy disk drive (1.2 MB 5.25" or 360 KB 5.25" and 1.44 MB 3.5" or 720 KB 3.5")
- Hard disk drive with a minimum of 10 MB free disk space

HEDSET without data needs a free disk space of circa 3.5 MB.

To avoid system crashes, indexing errors etc. it is highly recommended to provide an additional free disk space of circa 3 MB for swapping.
(CLIPPER, on which HEDSET is based, recommends a free swap space of double the size of the largest index file, in this case probably GLOSCODE.NT1).

Depending on the volume of substance data you should additionally provide for free disk space of between 2 MB and 5 MB per substance!

Because of intensive data exchange between memory and hard disk we highly recommend a 80386/33 MHz AT with a very fast hard disk to ensure acceptable performance.

4.2 Preparing your system

The HEDSET is a programme, which can be used in 9 different language versions; the data laid down in HEDSET will be transfered and uploaded to a multilingual database and can be interchanged between different HEDSET users. In order to insure that this transfer can be carried out effectively, it is necessary to confirm that your system is set up correctly. Therefore, and before calling the HEDSET programme, you must first check/modify the CONFIG.SYS of your PC:

1. Checking/Modifying the CONFIG.SYS
   Check, if the CONFIG.SYS contains the commands given in the example below. It is important that the order of the commands is the same as in the example. (The given configuration may differ slightly from yours, e.g. concerning the DOS directory, other drivers.) If changes of your CONFIG.SYS are necessary, you can carry them out by using the DOS editing programme or other editing programmes, e.g. with the command:
   EDIT CONFIG.SYS.

Check your CONFIG.SYS and, if necessary, modify or insert missing commands as shown (**Note to follow the right order!!!**):

SHELL=C:\COMMAND.COM /E:8192/P	(needed to find COMMAND.COM; reserves memory capacity; for DOS environment 8KB (=8192) recommended)
COUNTRY=032,,C:\DOS\COUNTRY.SYS	(country (=language) settings; the CONFIG.SYS will normally contain right country setting, as it is usually set when the operating system is installed; it can be checked in the MS-DOS manual; example given: Belgium (032))
DEVICE=C:\DOS\ANSI.SYS	(activates ANSI driver; it is important to activate ANSI driver prior to command DISPLAY.SYS)
DEVICE=C:\DOS\DISPLAY.SYS CON=(EGA,437,1)	(sets default codepage, see "Remark" below; example given: codepage 437)
FILES=55	(minimum 55 or higher)
BUFFERS=8	(minimum 8 or higher)

Remark:

Entering the default codepage of your system for DISPLAY.SYS is necessary to enable the system to return automatically to this default codepage after leaving HEDSET: it is recommended to use HEDSET only with a limited number of codepages (see below), which may not be the same as the default settings of your PC.

If you don't know the default hardware codepage which is set after booting your system, it is very simple to find out. Just enter the following DOS command:

KEYB **<ENTER>** (without any parameters)

and you will see the codepage and also the active keycode of your system on the screen. The codepage shown should be the same as the codepage entered in the CONFIG.SYS.

It is recommended, to check, if the right codepage is set by entering an example of a special character (characters for the different codepages are given in the MS-DOS manual).

Caution!

If you are using TSR (Terminate and Stay Resident) programmes, which may conflict with HEDSET please uninstall them by inserting e.g. ***REM*** in front of the corresponding command! **E.g.** the command "DEVICE = C:\DOS\EMM.SYS" might, if included in the CONFIG.SYS, conflict with the HEDSET programme, should be uninstalled by inserting REM in front of DEVICE as follows:

REM DEVICE = C:\DOS\EMM.SYS

2. Reboot your system!

3. Change to the logical drive you wish to install HEDSET (e.g. **C:**)

4. Create the HEDSET subdirectory (e.g. C:\> ***mkdir C:\HEDSET*** <**ENTER**>) and change to it (e.g. C:\> ***cd HEDSET***). (*)

5. Insert the original HEDSET installation diskette into the floppy drive (if there is more than one diskette, insert the first one) and change to the floppy drive (**A:** or **B:**).

6. Insert the following installation command to copy all necessary files to your HEDSET directory:

   e.g. A:\> ***HEDINST C:\HEDSET*** (for installation of HEDSET to directory C:\HEDSET)

7. Polyglot use of HEDSET
   Depending on the ASCII language file on your diskette, HEDSET system databases will be modified during first starting HEDSET.

(*) NB: During the development of the final version of HEDSET, copies of earlier test versions - versions 1.02 and 1.03 - were provided to selected companies to allow them to test the product. We are aware that companies may have used this earlier test versions as a basis for collecting data in anticipation of the entry into force of the Existing Chemicals Regulation. We wish to avoid that such companies are required to start from scratch and to recollect the HEDSET data files. Companies who have used former HEDSET versions to compile data sets should therefore follow the following instructions.

If you have installed a former HEDSET version before, you have to delete the files **HEDSET.EXE, HEDSET MEM, HEDNLS.BAT,** all system databases (**HEDI*.DBF**), all index files (***.NT***, e.g.*.NT1, *.NT2) and the file HEDSET.PCF **before** installing HEDSET!

Attention!

Don't delete **CASNO.DBF** and **CASNO.DBT** files, e.g. 50000.DBF or 50000.DBT, otherwise all entered data are lost!
It is also important to check all substance files with the new HEDSET version to avoid possible errors while creating export or print files!

4.3 Calling HEDSET with additional parameters

After preparing the system and copying all HEDSET files to the HEDSET directory, you should now call HEDSET.BAT

e.g. C:\>***cd HEDSET*** <ENTER>
C:\HEDSET>***HEDSET*** <ENTER>.

On the window, that will then appear on the screen, you will be asked to insert the path of the DOS directory of your PC:

"Please insert the DOS directory (current path: C:\DOS)"

If it is C:\DOS as the default value, you only have to press <ENTER>; if the path is different from the default value, it has to be entered here.

4.4 Setting the codepage for use within the HEDSET programme

On the following screens you will be asked for the codepage settings; to insure that the later data transfer will be carried out effectively, it is highly recommended to use either the Multinational mode (codepage 850, for all languages except Greek) or the Greek mode (codepage 437 "Greek"). Using the hardware default codepage may cause later conflicts when exchanging data: the identification of special characters would not be possible after transfering the data. If running HEDSET with codepage 437 "English", you should only use characters 1 up to 168 (ASCII-code) and with the other codepages only characters 1 up to 125 (ASCII-code).

The screens which follow, will allow you to chose one of the three possible options:

1. Running HEDSET with the multinational codepage (850)
2. Running HEDSET with the hardware default codepage
3. Running HEDSET with the codepage 437 "Greek"
   (the 3rd possibility is only available for PCs, which contain the Greek character set (Greek codepage)).

Important!

If you want to use the multinational mode (codepage 850) and your default codepage is also set to codepage 850 (see section 4.2) it is still necessary for technical reasons to chose the option (a) "Running HEDSET with the multinational codepage (850)" in the following series of screens.

The screens present themselves as follows:

1. **"Do you want to run HEDSET with multinational codepage (Y/N)?"**

If you answer with "Y" (=yes), you can continue with the HEDSET installation (see 4.).

If you answer "N" (=no), the the next question appears on the screen:

2. **"Do you want to run HEDSET with hardware default codepage (Y/N)?"**

By answering "Y", you can continue (see 5.), by answering "N", you will be asked:

3. **"Do you want to run HEDSET with Greek codepage (Y/N)?"**

If you answer "Y", you can continue (see 6.):

4.-6. You will be asked to confirm the settings made (e.g.):

4. **"The current DOS directory is : C:\DOS**
   You want to run HEDSET with multinational codepage
   Are these settings ok (Y/N)?")

5. **"The current DOS directory is : C:\DOS**
   You want to run HEDSET with hardware default codepage
   Are these settings ok (Y/N)?")

6. **"The current DOS directory is : C:\DOS**
   You want to run HEDSET with Greek codepage
   Are these settings ok (Y/N)?")

Answering the questions 4. - 6. with "Y", you will be asked:

7. **"Do you want to run HEDSET now?"**

Answering this question again with "Y" this will you bring you directly to the HEDSET programme.

Later Running HEDSET requires only calling: ***HEDSET*** or ***HEDSET [-options]***

If you want to change the settings made, you should call HEDSET.NLS, e.g. by the command: C:\HEDSET>***HEDSET nls*** <ENTER>.

Notice for Greek mode

To run HEDSET in Greek mode you need the Greek MS DOS version: the DOS files (EGA1.CPI, KEYBGK1.COM or EGA2.CPI, KEYBGK.COM) are necessary.
After starting HEDSET a message including the notice to switch to Greek characters pressing CTRL+ALT+F2 will appear on the screen. This is part of the Greek MS DOS programme and has to be carried out.
After using HEDSET in Greek mode it is highly recommended to reboot the system to return to the default settings.

Important!

Running HEDSET for the first time or after deleting the file **HEDSET.MEM** you will be asked for the language code. This code has to be the same as the extension of the language files on your diskette.

These are the language codes used in HEDSET:

DNK	Denmark	GRC	Greece	PRT	Portugal
FRA	France	ITA	Italy	ESP	Spain
DEU	Germany	NLD	Netherlands	GBR	United Kingdom

The default value is "GBR".

4.5 Warnings

A warning is given if the right codepage setting has failed or if there is not enough disk space while saving data.

4.6 Error messages and system crashes

Most errors will occur if there is not enough disk space to save data and to reindex the substances database or if there are any conflicts in memory management. Normally these index errors (**DBFNTX** or **DBSEEK**) will be reported in the file **HEDSET.LOG**. After this HEDSET will be terminated correctly. In case of indexing errors you will have to delete the index files (e.g. **67663.NT1** and **67663.NT2**) of the current substance. After restarting HEDSET and reactivating your current substance, these index files will be created automatically.

In case of real system crash without any chance for the HEDSET Error Detection, you have to check your system configuration if there are any entries in CONFIG.SYS or AUTOEXEC.BAT that will activate memory managers or something else causing conflicts with HEDSET. Especially Expanded Memory Managers may often conflict with Extended Memory Managers ending with an unexpected system crash. After checking and possibly modifying your system you first have to delete **HEDSET.MEM** before calling HEDSET again!

Highly recommended!

In the case an error occurs, have a look into the troubleshooting file **TROUSHOO.TXT** if there are any information about the problem and instructions, how to solve it.
If not, check your system, check free disk space, memory managers etc., try to find out the cause of error.

The content of the troubleshooting file is also given in Annex 2.

4.7 Help desk

If you have problems with the HEDSET programme ir if you need further information to complete the HEDSET diskette please contact the **HELP desk facility of the Commission of the European Communities:**

HEDSET - Help Desk
Existing Chemicals Unit
Joint Research Centre
European Communities
I - 21020 ISPRA (VA)
Italy

Tel. (39) (332) 785866
Fax. (39) (332) 785862

ANNEX 1

Print Control File

The print control file, e.g. HEDPCF.GBR (name for the English version with country code GBR), will print the data in a desired form. The result is nearly identical to the screen presentation.

Note:

The option "Print Control File" is only to be recommended to experienced PC users.

Chapter and Field Identification (ID):

There are four different types of ID in the format data for printing:

1.	Chapter ID	e.g. #B001	treats one chapter after another
2.	Field ID	e.g. #F001,|F001	treats one field after another
3.	Record ID	e.g. #R001	identifies a record
4.	Date ID	e.g. #D	date insert

As the print control file is an ASCII data file, you can of course choose your own printed format. Please note the following :

1. The print control file interprets chapters as follows: all lines are read until a chapter ID is recognised (the exception is a free text chapter-recognition #B601). Given that each chapter number corresponds to a chapter, then the heading of this chapter will follow.

2. In place of the field ID the corresponding field contents are incorporated. If the contents of a field is longer than what is foreseen, then the field contents are divided up into several lines.

   Given that the field ID must consist of 5 digits, they can be exceptions where problems arise, if for example two characters should follow each other, for instance as in chapter 1.6.1 "Labelling".

Printer file entry:	Symbols #F008#F009#F010
Printed result:	Symbols 12 34 56
Desired result	Symbols 12 34 56

   In order to obtain the desired result, the two last fields must be linked to the former. This can be done with the character " \| " ("OR" - character) in the place of #. By using this entry in the printer data file the desired result can be obtained:

Printer file entry	Symbols #F008|F009|F010
Printed result	Symbols 12 34 56

3. The record ID "#R001" is only used in one special case, namely chapter 1.02 "ID of diskette submitter" and 1.03 "ID of submitter of the full HEDSET". Because both chapters use the same chapter ID, they are interpretated by the system as record 1 and record 2.

The following example illustrates the necessity of differentating between the records:

Printer File Entry		**Printed result**
ID of diskette submitter	#B004#R001	ID of diskette submitter
Company:	#F003	Company: Company 1
Creation date:	#B003#F006	Creation date: 25/05/92
ID of submitter of full HEDSET	#B004#R002	ID of submitter of full HEDSET
Company:	#F003	Company: Company 2
Creation date:	#B003#F008	Creation date: 25/05/92

If the record IDs #R001 and #R002 are dropped then the printed result is as follows:

ID of diskette submitter	
Company:	Company 1
Company:	Company 2
Creation date:	25/05/92
ID of submitter of full HEDSET	
Company:	Company 1
Company:	Company 2
Creation date:	25/05/92

4. The date ID in the printer file will be replaced by the current MS-DOS system data.

5. While inserting texts, chapter headings, commentaries and so on after the chapter, then the chapter ID should placed in the first line. It is possible here to use the ID #B003 as a dummy chapter.

Summary

- the interpretation of the sub-chapter and field IDs are only possible when these are defined in the system's database;
- all IDs except the date ID must have 5 digits;
- only one sub-chapter ID per line;
- sub-chapter independent texts must have the sub-chapter ID #B003;
- free texts must be separated from the other by a blank line.

ANNEX 2

HEDSET - Trouble Shooting

Purpose:

Because of an unlimited number of PC system configurations, separate DOS versions, installed TSR programs etc., it is very difficult to make up correct diagnostics in case of errors.

Nevertheless this trouble shooting file should give you as far as possible a little help if there are any problems using HEDSET.

Especially rare problems we could not find on our systems but were detected by HEDSET users will be described with possible diagnostics.

Notice:If there is any problem that causes HEDSET to fail you will see an Error message. The cause of failure most will be documented in HEDSET.LOG created from the HEDSET Runtime Error Detection.

If there is no more possibility to write in HEDSET.LOG in case of missing disk space the cause of failure will be shown on your screen. Please write down the message and contact your System Administrator.

Known problems and diagnostics

1. Problem: HEDSET aborts while saving data !

   Errormessage:DBSEEK(0) Internal Error

   Probable Reason: After saving data into a work file all index files have to be rebuilt. To do this HEDSET needs free swap space on disk. If there are any problems with reindexing because of too little disk space the index file will be damaged. Because of this the seeking command DBSEEK will have to fail!

   Help: For your work file 12345.DBF you have to delete the two corresponding index files 12345.NT1 and 12345.NT2. After restarting HEDSET again these index files will be recreated. Your data should not be lost !

2. Problem: Could not use HEDSET anymore.

   Errormessage:System crash or corrupted databases !

   Probable Reason: Abnormal program termination or corrupted databases !

   Help: Delete the file HEDSET.MEM and restart HEDSET. Remember that you have to repeat all option settings you have made before.

3. Problem: In the window of the chapter menu occasionally appear two identical chapters 1.02. The chapter 1.01 is missing.

   Probable Reason: Could not be detected.

   Help: The one and only recommendation we could give: Enter 1.02 (ID of diskette submitter), jump behind the company data to the first of the questions, change and rechange it to reinitialize the chapters !

4. Problem: Installation HEDSET on Laptops

   Installing HEDSET on Laptops, the setting of the right codepages may be different from MS DOS of Microsoft. To set the codepages in the right way, you should have a look to your MS DOS manual.
   Before starting HEDSET, test the codepages set as follows:

   1. Check your CONFIG.SYS for the following lines:

   DEVICE = C:\DOS\ANSI.SYS
   DEVICE = C:\DOS\DISPLAY.SYS CON = (EGA,437,1)
   FILES = 55

   2. Now try the following commands manually (HEDSET will call these commands automatically):

   MODE CON CP PREP = ((850) C:\DOS\EGA.CPI)

   It is ok if you receive a message like this:

   "MODE prepare code page function completed"

   If not, your system could not prepare code page 850 !

   Now check the next one:

   MODE CON CP SEL = 850

   It is ok if you receive a message like this:

   "MODE select code page function completed"

   If not, your system could not select code page 850 !

   Finally enter the command:

   KEYB (without any parameters)

   This command should show you some information about the actual keycode and code page. (This command will also be used by HEDSET to write this information into HEDSET.CP and to check it at the beginning of the programme.

Notice:

If one of these commands fails, you will have to check your system to find out why codepage setting would not be possible. In the worst case you would have to install another operating system.

Important:

If there is no possibility to set the right codepage (850/437 GK) you still may use HEDSET if you are not using special ASCII characters.

H E D S E T

Explanatory Note

Harmonized Electronic Data Set for the Council Regulation on the Evaluation and Control of the Risks of Existing Substances and the OECD Existing Chemicals Programme

Contents **Page**

Explanatory note

PRELIMINARY REMARKS

Before starting to enter data, the manufacturers and the importer or the sponsor country and lead organisations that would provide data on the chemicals (hereinafter referred to as "the compiler of data") should read this explanatory note carefully.

The compiler of data shall apply the rules set out below when filling in the Harmonised Electronic Data Input Set (hereinafter referred to as "HEDSET").

This HEDSET can be used for both the Community's and the OECD`s Programmes on Existing chemicals. It will be sufficient to make a copy of the completed HEDSET which can then be sent to the other authority (Commission of the European Communities or OECD Sponsor Country) requesting the data.

If this electronic data set is used for the Regulation in the Community then only the requested data, set out in Annex 3 of the regulation, must be given. Further data however can also be given. Although items 1.03, 1.6.1, and 1.6.2 are not prepared for the OECD use, the sponsor country and the lead organisation are recommended to submit the information.

Although items 1.4, 1.8, 1.9, 3.4, 4.5, 4.7, and 4.8 are not prepared for EEC use, the manufacturer and importer are recommended to submit the information.

The HEDSET will be available on both a HD/DD 3.5 inch 1.4 MB/740 KB diskette and on a HD/DD 5.25 inch 1.2 MB/360 KB diskette. If there is more than one set of test results available for the same data item then the software will support multi-entry facilities.

Instructions

I Common Features

The following instructions, applicable to all sections of the HEDSET, are entered here to avoid repetition.

Multi-entry Facilities

The compiler of data is requested to use the multi-entry facilities when more than one data set (study) is available for the same section or when the same study covers different sections of the HEDSET. Two different studies linked to different references even when they are related to the same section should not be included in the same record.

Remarks Field

Any additional information that is not covered by the glossaries or the references is to be included in the remarks field and must be filled in at the end of each block.

Wherever "other" appears in a glossary, the detailed information must be filled in at the end of each block, in the "remarks field" or by using the "other" facility (see manual). This information may cover several different topics for the same data set (study). The compilers of data are therefore requested to code the remarks with the relevant code as shown below.

Code	Contents
CT	Country
ME	Method
RE	Reference
RM	Remarks
RS	Result(s)
TC	Test condition
TS	Test substance

Example:
In the photodegradation section, one may wish to include remarks on the test substance if "other" is used in the glossary (**TS**), on light condition (**TC**), on result (**RS**) as well as the references (**RE**)

References

If more than one reference is available for the results of a test study then the primary source or the most complete one should be listed first in the free text field (RE) Full details of these references should be entered in the free text field (RE). (e.g. for literature(s), article(s): name(s) of the author(s), title of the article, name of the journal or Coden, volume number of the journal , the page number of the article (from - to) and the year of the publication; for books or reviews: name(s) of the author(s), title of the publication, title of the book name(s) of the editors, name of the publisher, city of the publisher's address, year of the publication, the page number (from - to), ISBN number and remark).

II Specific Instructions

1 General Information

1.01 Substance Identification

CAS No - number given by the Chemical Abstracts Registry Service.

IUPAC-Name - use the name given in the EINECS Inventory

EINECS No - number given to the substance in the European Inventory of Existing Commercial Chemical Substance, if available

Molecular Formula - Indicate the molecular formula.

Structural Formula - Indicate the structural formula in Smiles code, if available.

Substance Group - (only for Petroleum products) complete using one of the following glossary codes

Contents

1 **Crude oil**
Raw petroleum obtained in its natural state from the ground (excluding hydrocarbons from shale) and containing aliphatic, and aromatic hydrocarbons, with small quantities of nitrogen, oxygen and sulphur compounds

2 **Petroleum gases**
Streams obtained from crude oil distillation, cracking processes and tail gases, containing saturated and/or olefinic hydrocarbons mainly in the range C2 to C5 including liquefied gases, predominantly propane and butane

3A **Gasoline Components from crude oil distillation**
Streams obtained from the atmospheric distillation of crude oil and containing saturated and aromatic hydrocarbons, mainly in the range C4 to C12 and boiling in the range ca. -20 to 230° C

3B **Gasoline components from alkylation, isomerisation and solvent extraction**
Streams obtained by alkylation (catalytic reaction), and solvent extraction, and containing saturated hydrocarbons, mainly in the range C5 to C12 and boiling in the range ca. 35 to 230° C

3C **Gasoline components from catalytic cracking**
Streams obtained from the catalytic cracking of heavy distillates into lighter fractions, and containing saturated, olefinic and aromatic hydrocarbons, mainly in the range C4 to C12 and boiling in the range ca. -20 to 230° C

3D **Gasoline components from catalytic reforming**
Streams obtained from the catalytic reforming of mainly n-alkane and cycloparaffinic feed stock into aromatic and branched chain hydrocarbons, mainly in the range C5 to C12 and boiling in the range ca. 35 to 230° C

3E **Gasoline Components from thermal reforming**
Streams obtained by the high temperature splitting of heavy distillates into lighter fractions, and containing saturated olefinic and aromatic hydrocarbons, mainly in the range C4 to C12 and boiling in the range ca. -20 to 230°C

3F **Gasoline Components from hydrotreating**
Streams obtained by the catalytic reaction of feed stocks with hydrogen to remove unsaturated and organo-sulphur compounds, and containing mainly saturated hydrocarbons, mainly in the range C4 to C12 and boiling in the range ca. -20 to 230°C

3G **Other gasoline components**
Streams obtained by processes such as steam and hydro cracking and sweetening, and containing mainly saturated, aromatic and olefinic hydrocarbons, mainly in the range C4 to C12 and boiling in the range ca. -20 to 230°C

3H **Straight run kerosine components**
Streams obtained from the atmospheric distillation of crude oil, and containing saturated and aromatic hydrocarbons, mainly in the range C9 to C16 and boiling in the range ca. 145 to 300°C

3I **Cracked kerosine components**
Streams obtained from processes involving the cracking of hydrocarbons feed stock, and containing saturated, aromatic and olefinic hydrocarbons, mainly in the range C8 to C16 and boiling in the range ca. 90 to 290°C

3J **Other kerosine components**
Streams obtained from processes not sufficiently defined to enable them to be placed in group 3H or 3I and containing saturated, aromatic and olefinic hydrocarbons, mainly in the range C7 to C16 and boiling in the range ca. 90 to 290°C

4A **Straight run gas oil components**
Streams obtained from the atmospheric distillation of crude oil, and containing saturated and aromatic hydrocarbons, mainly in the range C9 to C25 and boiling in the range ca. 150 to 400°C

4B **Cracked gas oil components**
Streams obtained from processes involving the cracking of hydrocarbons feed stocks, and containing saturated, olefinic and aromatic hydrocarbons, mainly in the range C9 to C25 and boiling in the range ca. 150 to 400°C

5A **Vacuum gas oil components**
Streams obtained from the vacuum distillation of atmospheric residues, and containing saturated and aromatic hydrocarbons, mainly in the range C11 to C25 and boiling in the range ca. 200 to 450°C

5B **Other gas oil components**
Streams obtained from processes not sufficiently defined to enable them to be placed in group 4A, 4B or 5A and containing saturated, aromatic and olefinic hydrocarbons, mainly in the range C9 to C25 and boiling in the range ca. 150 to 450°C

6A **Fuel oil components**
Streams obtained as either distillates or residues from distillation and cracking processes, and containing saturated, aromatic and olefinic hydrocarbons, mainly in the range C9 to C50 and boiling in the range ca. 160 to 600°C

6B **Lubricating greases**
A complex combination of hydrocarbons mainly in the range C12 to C50 and containing organic compounds of alki metals, alkaline earth metals and/or aluminium

7A **Unrefined or acid treated vacuum distillates**
Untreated and acid treated streams obtained from the vacuum distillates of atmospheric residues, and containing saturated and aromatic hydrocarbons, mainly in the range C15 to C50

7B **Non carcinogenic lubricant base oils**
Streams obtained by (a) severe vacuum distillates to remove aromatic hydrocarbons or (b) the treatment of vacuum, and containing saturated and aromatic hydrocarbons, mainly in the range C12 to C50

7C **Other lubricant base oils**
Streams obtained from vacuum distillates, vacuum residues and atmospheric distillation residues by process such as solvent extraction or hydrogenation, and containing saturated and aromatic hydrocarbons, mainly in the range C10 to C50

8 **Residual aromatic extracts**
Streams obtained from the solvent extraction of vacuum residues, and containing saturated and aromatic hydrocarbons, mainly in the range > C25

9A **Untreated aromatic extracts from vacuum distillates**
Streams obtained from the solvent extraction of vacuum distillates, and containing mainly aromatic hydrocarbons, mainly in the range C15 to C50

9B **Treated aromatic extracts from vacuum distillates**
Streams obtained by subjecting untreated aromatic extracts from vacuum distillates to process such as hydrogenation, and containing predominantly saturated and aromatic hydrocarbons, mainly in the range C15 to C50

10 **Other aromatic extracts**
Streams obtained by the solvent extraction of straight run gas oils, vacuum gas oils and distillation residues etc., and containing saturated and aromatic hydrocarbons, mainly in the range C9 to C30 and boiling in the range in the range ca. 150 to 450° C

11A **Petroleum waxes**
Streams obtained as the insoluble phase from the solvent treatment of atmospheric and vacuum distillates or vacuum residues, and containing saturated straight and branched chain hydrocarbons, mainly in the range C20 to C50

11B **Foots oils**
Streams obtained as the liquid phase in the separation of paraffin wax from slack wax, and containing mainly branched chain saturated hydrocarbons, mainly in the range C20 to C50

11C **Slack waxes**
Streams obtained by the solvent dewaxing of vacuum distillates, and containing straight and branched chain hydrocarbons, mainly in the range >C20

11D **Petrolatums**
Streams obtained by the solvent dewaxing of vacuum residues, and containing mainly branched chain hydrocarbons, mainly in the range > C20

12 **Used and re-refined oils**
Spent formulated oils derived from various uses, most of which are treated by processes such as clay percolation, hydrogenation and distillation, and mainly in the range C15 to C50

13 **Bitumens (asphalts) and vacuum residues**
Streams obtained as residues from vacuum distillation and cracking processes, some of which are subjected to further processing, and containing saturated and aromatic hydrocarbons mainly in the range > C25

14 **Petroleum cokes**
Granular or needle like substances, basically carbon, obtained by the high temperature decomposition of heavy oil. May contain some high molecular weight hydrocarbons

Substance Remark - Indicate the substance remark as prescribed in the EINECS Inventory

Molecular Weight - Indicate the molecular weight

1.02 ID of Diskette Submitter

Please indicate who is submitting the data sheet .

Name - indicate the name of the Company
Type - complete using one the following glossary codes

Contents
importer
other
producer

Address - please give the full name and address.

Street - indicate the street
Postal Code - indicate the postal code
Town - indicate the town

Country - complete using one of the following glossary codes

Contents

Australia	Japan
Austria	Luxembourg
Belgium	Netherlands
Canada	New Zealand
Denmark	Norway
Finland	Portugal
France	Spain
Germany	Sweden
Greece	Switzerland
Iceland	Turkey
Ireland	United Kingdom
Italy	United States
	other

CEDEX - indicate the Cedex
Telephone - indicate the telephone
Telefax - indicate the telefax
Telex - indicate the telex

Has the complete Data Set already been submitted by another manufac-turer or importer ? - complete using one of the following glossary codes

Contents
no
no data
yes

If yes give the full name and address of the **manufacturer or importer** who is responsible for having filled in and returned the completed HED Set - complete (see chapter 1.03)

Specify if you are acting on behalf of another concerned manufacturer or importer. Indicate if you are the manufacturer or importer who is responsible for having filled in and returned the completed HED Set - complete using one of the following glossary codes

Contents
no
no data
yes

1.03 ID of the submitter of the full HEDSET

Name - indicate the name of the company
Type - complete using one the following glossary codes

Contents
importer
other
producer

Street- indicate the street
Postal Code - indicate the postal code
Town - indicate the town
Country - complete using one of the following glossary codes

Contents	
Australia	Japan
Austria	Luxembourg
Belgium	Netherlands
Canada	New Zealand
Denmark	Norway
Finland	Portugal
France	Spain
Germany	Sweden
Greece	Switzerland
Iceland	Turkey
Ireland	United Kingdom
Italy	United States
	other

CEDEX - indicate the Cedex
Telephone - indicate the telephone
Telefax - indicate the telefax
Telex - indicate the telex

1.04 OECD and Company Information

Type - complete using one the following glossary codes

Contents
company
lead organisation
other
sponsor country

Name - indicate the name
Partner - indicate the name of the partner
Date - indicate the date
Street- indicate the street
Postal Code - indicate the postal code

Town - indicate the town

Country - complete using one of the following glossary codes

Contents	
Australia	Japan
Austria	Luxembourg
Belgium	Netherlands
Canada	New Zealand
Denmark	Norway
Finland	Portugal
France	Spain
Germany	Sweden
Greece	Switzerland
Iceland	Turkey
Ireland	United Kingdom
Italy	United States
	other

Telephone - indicate the telephone
Telex - indicate the telex
Telefax - indicate the telefax
CEDEX - indicate the CEDEX

1.1 General Substance Information

Type of substance - Indicate the type of substance - complete using the following glossary codes

Contents
element
inorganic
natural substance
organic
organometallic
petroleum product

Physical state at 20° C and 1.013 hPa - complete using one of the following glossary codes

Contents
gaseous
liquid
solid

Purity - Indicate the representative purity as it is produced or imported in percentage terms (weight/weight)

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Numerical or lower value** - value or lower value of the range of the purity

c) **Upper value** - upper value of the range of the purity

greater than	**95.5 %**	**>**	**95.5**	_____
	= 95.5 %	**=**	**95.5**	_____
	97 % - 99 %	_____	**97**	**99**____

1.2 Synonyms - enter synonyms, additional synonym can be entered using F5 key.

1.3 Impurities - Indicate the impurities in percentage terms.

CAS No - number given by the Chemical Abstracts Registry Service

EINECS No - number given to the substance in the European Inventory of Existing Commercial Chemical Substance, if available

IUPAC name - use the IUPAC name of the impurity

Value

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Numerical or lower value** - value or lower value of the range of the impurity

c) **Upper value** - upper value of the range of the impurity

1.4 Additives - Indicate the additives percentage terms. Enter in this chapter also the componts of the **UVCB substances** (Substances with no defined composition)

CAS No - number given by the Chemical Abstracts Registry Service

EINECS No - number given to the substance in the European Inventory of Existing Commercial Chemical Substance, if available

IUPAC name - use the IUPAC name of the additives

Value

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Numerical or lower value** - value or lower value of the range of the additive

c) **Upper value** - upper value of the range of the additive

1.5 Quantity (produced or imported, greater than 1000 tonnes per year)
Indicate the greatest quantity range of the substance produced, or imported, at least once in the last 3 years. For EEC Member States only indicate the Community import figure (do not indicate the export from one Member State to another). Give an estimation of the global production quantity in the remarks field. If information for countries is available, input it by using the multi-entry programme with the name of the country in the "remarks field". Information on the number of producers in the country and the source of information should also be described in the "remarks field".

a) **Quantity produced or imported** - complete using one of the following glossary codes

Contents
imported
produced

b) **Range of quantity produced or imported** - complete using one of the following glossary codes

Contents			
10	-	50	tonnes per annum
50	-	100	tonnes per annum
100	-	500	tonnes per annum
500	-	1 000	tonnes per annum
1 000	-	5 000	tonnes per annum
5 000	-	10 000	tonnes per annum
10 000	-	50 000	tonnes per annum
50 000	-	100 000	tonnes per annum
100 000	-	500 000	tonnes per annum
500 000	-	1 000 000	tonnes per annum
more than		1 000 000	tonnes per annum

Year - **For the purpose of the EEC regulation**, the reference point is the date of adoption of the regulation. For tonnages imported or produced in the 12 months preceding the date of adoption, the value to be entered in the "year" field would be 1992. For the period 24 months to 12 months preceding adoption and 36 to 24 months preceding adoption the entries in the "year" field would be 1991 and 1990 respectively.

Indicate if the substance has been produced during the 12 months after adoption of the EEC regulation on existing substances - complete using one of the following glossary codes

Contents
no
no data
yes

Indicate if the substance has been imported during the12 months after adoption of the EEC regulation on existing substances - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks: Give further information such as name of the country, number of producers in the country, estimation of the global production quantity and the source of information.

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

1.6 Labelling and Classification

Labelling and classification by EEC-Directive: if the substance is in Annex 1 of the Council Directive 67/548/EEC of 27 June 1967, then it should be classified and labelled accordingly.

Provisional labelling and classification by manufacturer or importer: if the substance is not in Annex 1 of the Council Directive 67/548/EEC of 27 June 1967, then the substance should be provisionally classified and labelled by the manufacturer or importer.

No labelling and no classification (no dangerous properties): if the substance has no dangerous properties (within the meaning of the Council Directive 67/548/EEC of 27 June 1967), then no classification and no labelling is required.

No labelling and no classification (no data available): the dangerous properties of the substance are unknown.

Labelling and classification by other regulations: if the substance is produced or imported outside the Community, then indicate this regulation and the contents of classification in the remarks field

1.6.1 Labelling

Is the substance Labelled by - complete using one of the following glossary codes

Contents
as in Directive 67/548/EEC
no labelling required (no dangerous properties)
no labelling required (no data available)
other (in other legislation)
provisionally by manufacturer or importer

Specific Limits

Indicate, if there are specific limits (e.g. Concentration limits, ...) in Annex 1 of the Directive 67/548/EEC. - complete using the following glossary codes

Contents
no
no data
yes

Symbols

Use the Symbols prescribed by Annex II of the Council Directive 67/548/EEC of 27 June 1967. If the substance is produced outside or exported from the Community, then indicate the symbols which correspond to Directive 67/548/EEC, if available.

Symbols - complete using the following glossary codes

Contents	
C	corrosive
E	explosive
F	highly flammable
F+	extremely flammable
N	dangerous for the environment
O	oxidizing
other RM (indicate the symbol)	
T	toxic
T+	very toxic
Xi	irritant
Xn	harmful

Nota

Use the Nota prescribed the Council Directive 67/548/EEC of 27 June 1967, if the substance is produced outside or exported from the Community, then indicate the nota which correspond to Directive 67/548/EEC, if available - complete using one of the following glossary codes.

Contents
A
B
C

D
E
F
G
other RM

Remarks: Give further information such as name of the regulation, the country, and the source of information.

R-Phrases

Use the R-phrases prescribed by Annex III of the Council Directive 67/548/EEC of 27 June 1967. If the substance is produced outside or exported from the Community, then indicate R-phrases which correspond to Directive 67/548/EEC, if available.

R-phrases - complete using the following glossary codes

Code	
R 1	Explosive when dry
R 2	Risk of explosion by shock, friction, fire or other sources of ignition
R 3	Extreme risk of explosion by shock, friction, fire or other sources of ignition
R 4	Forms very sensitive explosive metallic compounds
R 5	Heating may cause an explosion
R 6	Explosive with or without contact with air
R 7	May cause fire
R 8	Contact with combustible material may cause fire
R 9	Explosive when mixed with combustible material
R 10	Flammable
R 11	Highly flammable
R 12	Extremely flammable
R 13+	Extremely flammable liquefied gas
R 14	Reacts violently with water
R 14/15	Reacts violently with water, liberating extremely flammable gases
R 15	Contact with water liberates extremely flammable gases
R 15/29	Contact with water liberates toxic, extremely flammable gas
R 16	Explosive when mixed with oxidizing substances
R 17	Spontaneously flammable in air
R 18	In use, may form flammable/explosive vapour-air mixture
R 19	May form explosive peroxides
R 20	Harmful by inhalation
R 20/21	Harmful by inhalation and in contact with skin
R 20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R 20/22	Harmful by inhalation and if swallowed
R 21	Harmful in contact with skin
R 21/22	Harmful in contact with skin and if swallowed
R 22	Harmful if swallowed
R 23	Toxic by inhalation
R 23/24	Toxic by inhalation and in contact with skin
R 23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R 23/25	Toxic by inhalation and if swallowed
R 24	Toxic in contact with skin
R 24/25	Toxic in contact with skin and if swallowed

R 25	Toxic of swallowed
R 26	Very toxic by inhalation
R 26/27	Very toxic by inhalation and in contact with skin
R 26/27/28	Very toxic by inhalation, in contact with skin and if swallowed
R 26/28	Very toxic by inhalation and if swallowed
R 27	Very toxic in contact with skin
R 27/28	Very toxic in contact with skin and if swallowed
R 28	Very toxic if swallowed
R 29	Contact with water liberates toxic gas
R 30	Can become highly flammable in use
R 31	Contact with acids liberates toxic gas
R 32	Contact with acids liberates very toxic gas
R 33	Danger of cumulative effects
R 34	Causes burns
R 35	Causes severe burns
R 36	Irritating to eyes
R 36/37	Irritating to eyes and respiratory system
R 36/37/38	Irritating to eyes, respiratory system and skin
R 36/38	Irritating to eyes and skin
R 37	Irritating to respiratory system
R 37/38	Irritating to respiratory system and skin
R 38	Irritating to skin
R 39	Danger of very serious irreversible effects
R 39/23	Toxic: danger of very serious irreversible effects through inhalation
R 39/23/24	Toxic: danger of very serious irreversible effects through inhalation and in contact with skin
R 39/23/24/25	Toxic: danger of very serious irreversible effects through in halation, in contact with skin and if swallowed
R 39/23/25	Toxic: danger of very serious irreversible effects through inhalation and if swallowed
R 39/24	Toxic: danger of very serious irreversible effects in contact with skin
R 39/24/25	Toxic: danger of very serious irreversible effects in contact with skin and if swallowed
R 39/25	Toxic: danger of very serious irreversible effects if swallowed
R 39/26	Very toxic: danger of very serious irreversible effects through inhalation
R 39/26/27	Very toxic: danger of very serious irreversible effects through inhalation and in contact with skin
R 39/26/27/28	Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R 39/26/28	Very toxic: danger of very serious irreversible effects through inhalation and if swallowed
R 39/27	Very toxic: danger of very serious irreversible effects in contact with skin
R 39/27/28	Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed
R 39/28	Very toxic: danger of very serious irreversible effects if swallowed
R 40	Possible risks of irreversible effects
R 40/20	Harmful: possible risk of irreversible effects through inhalation
R 40/20/21	Harmful: possible risk of irreversible effects through inhalation and in contact with skin
R 40/20/21/22	Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed
R 40/20/22	Harmful: possible risk of irreversible effects through inhalation and if swallowed
R 40/21	Harmful: possible risk of irreversible effects in contact with skin

R 40/21/22	Harmful: possible risk of irreversible effects in contact with skin and if swallowed
R 40/22	Harmful: possible risk of irreversible effects if swallowed
R 41	Risk of serious damage to eyes
R 42	May cause sensitization by inhalation
R 42/43	May cause sensitization by inhalation and skin contact
R 43	May cause sensitization by skin contact
R 44	Risk of explosion if heated under confinement
R 45	May cause cancer
R 46	May cause heritable genetic damage
R 47+	May cause birth defects
R 48	Danger of serious damage to health by prolonged exposure
R 48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R 48/20/21	Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin
R 48/20/21/22	Harmful: danger of serious damage to health by longed exposure through inhalation. in contact with skin and if swallowed
R 48/20/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R 48/21	Harmful: danger of serious damage to health by prolonged exposure in contact with skin
R 48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R 48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed
R 48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation
R 48/23/24	Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin
R 48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R 48/23/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R 48/24	Toxic: danger of serious damage to health by prolonged exposure in contact with skin
R 48/24/25	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R 48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed
R 49	May cause cancer by inhalation
R 50	Very toxic to aquatic organisms
R 5053*	Very toxic to aquatic organisms, may cause long-term adverse effects the aquatic environment
R 51	Toxic to aquatic organisms
R51/53*	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R 52	Harmful to aquatic organisms
R 52/53*	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R 53	May cause long-term adverse effects in the aquatic environment
R 54	Toxic to flora
R 55	Toxic to fauna
R 56	Toxic to soil organisms
R 57	Toxic to bees
R 58	May cause long-term adverse effects in the environment

R 59	Dangerous for the ozone layer
R60*	May impair fertility
R61*	May cause harm to unborn child
R62*	Possible risk of impaired fertility
R63*	Possible risk of harm to unborn child
R64*	May cause harm to breastfed babies

The R phrases above are generally based upon those appearing in the 12th adaptation to technical progress to Directive 67/548/EEC (O.J., L 180 08.07.1991, p. 1) The 18th adaptation to technical, progress, due to be published in the first half of 1993 will amend or delete some existing R phrases and add additional R phrases.

Nevertheless, it is possible that the wording of the R phrases given above, will not correspond exactly with that which will eventually be published in the 18th adaptation. However, as the only information which has to be recorded in the HEDSET is the correct number of the R phrases and these numbers will not change, submitters should ignore any minor inconsistencies in wording and simply concentrate on recording the correct number of the R phrases

The list of R phrases includes the new R phrases (they are marked with *) which are expected to be introduced in the 18th adaptation. Submitters are free to enter the number corresponding to these phrases from the date of the publication in the Official Journal. The list includes the R phrases which are expected to be deleted as a part of the 18th adaptation (marked with +). Submitters are advised not to use these R phrases.

Remarks: Give further information such as name of the regulation, the country, and the source of information.

S-Phrases

Use the S-phrases prescribed by Annex VI of the Council Directive 67/548/EEC of 27 June 1967. If the substance is produced outside or exported from the Community, then indicate the S-Phrases which correspond to Directive 67/548/EEC, if available. Include the missing remarks for the S-Phrase

S-Phrases - complete using the following glossary codes

Cont.	
S 1	Keep locked up
S 1/2	Keep locked up and out of reach of children
S 2	Keep out of reach of children
S 3	Keep in a cool place
S 3/7*	Keep container tightly closed in a cool place
S 3/14	Keep in a cool place away from ..(incompatible materials to be indicated by the manufacturer)
S 3/7/9+	Keep container tightly closed in a cool, well-ventilated place
S 3/9+	Keep in a cool, well-ventilated place
S 3/9/14	Keep in a cool, well-ventilated place away from .....(incompatible materials to be indicated by the manufacturer)

S 3/9/14/49	Keep only in the original container in a cool, well-ventilated place away from ....(incompatible materials to be indicated by the manufacturer)
S 3/9/49	Keep only in the original container in a cool, well-ventilated place
S 4	Keep away from living quarters
S 5	Keep contents under .....(appropriate liquid to specified by the manufacturer)
S 6	Keep under .....(inert gas to be specified by the manufacturer)
S 7	Keep container tightly closed
S 7/8	Keep container tightly closed and dry
S 7/9	Keep container tightly closed and in a well-ventilated place
S 7/47*	Keep container tightly closed and at a temperature not exceeding ....C (to be specified by the manufacturer)
S 8	Keep container dry
S 9	Keep container in a well-ventilated place
S12	Do not keep the container sealed
S13	Keep away from food, drink and animal feeding stuffs
S14	Keep away from .....(incompatible materials to be indicated by the manufacturer)
S15	Keep away from heat
S16	Keep away from sources of ignition - No smoking
S17	Keep away from combustible material
S18	Handle and open container with care
S20	When using do not eat or drink
S20/21	When using do not eat, drink or smoke
S21	When using do not smoke
S22	Do not breathe dust
S23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer)
S24	Avoid contact with skin
S24/25	Avoid contact with skin and eyes
S25	Avoid contact with eyes
S26	In closed of contact with eyes, rinse immediately with plenty of water and seek medical advice
S27	Take off immediately all contaminated clothing
S28	After contact with skin, wash immediately with plenty of ....(to be specified by the manufacturer)
S29	Do not empty into drains
S29/56*	Do not empty into drains, dispose of this material and its container to hazardous or special waste collection point
S30	Never add water to this product
S33	Take precautionary measures against static discharges
S34+	Avoid shock and friction
S35	This material and its container must be disposed of in a safe way
S36	Wear suitable protective clothing
S36/37	Wear suitable protective clothing and gloves
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S36/39	Wear suitable protective clothing and eye/face protection
S37	Wear suitable gloves
S37/39	Wear suitable gloves and eye/face protection
S38	In case of insufficient ventilation, wear suitable respiratory equipment
S39	Wear eye/face protection
S40	To clean the floor and all objects contaminated by this material, use ....(to be specified by the manufacturer)
S41	In case of fire and/or explosion do not breathe fumes

S42	During fumigation/spraying wear suitable respiratory equipment (appropriate wording to be specified by the manufacturer)
S43	In case of fire, use .....(indicate in the space the precise type of fire-fighting
S44	If you feel unwell, seek medical advice (show the label where possible)
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S46	If swallowed, seek medical advice immediately and show this container or label
S47	Keep at temperature not exceeding ....C (to be specified by the manufacturer)
S47/49	Keep only in the original container at temperature not exceeding .....C(to be specified by the manufacturer)
S48	Keep wetted with .....(appropriate material to be specified by the manufacturer)
S49	Keep only in the original container
S50	Do not mix with ....(to be specified by the manufacturer)
S51	Use only in well-ventilated areas
S52	Not recommended for interior use on large surface areas
S53	Avoid exposure - obtain special instructions before use
S54+	Obtain the consent of pollution control authorities before discharging to waste water treatment plants
S55+	Treat using the best available techniques before discharge iinto drains or the aquatic environment
S56	Dispose of this material and its container to hazardous or special waste collection point
S57	Use appropriate containment to avoid environmental contamination
S58+	To be disposed of as hazardous waste
S59	Refer to manufacturer/supplier for information on recovery/recycling
S60	This material and/or its container must be disposed of as hazardous waste
S61*	Avoid release in the environment refer to special instructions/Safety data sheets
S62*	If swallowed, do not ...

The S phrases above are generally based upon those appearing in the 12th adaptation to technical progress to Directive 67/548/EEC (O.J., L 180 08.07.1991, p. 1) The 18th adaptation to technical, progress, due to be published in the first half of 1993 will amend or delete some existing S phrases and add additional S phrases.

Nevertheless, it is possible that the wording of the S phrases given above, will not correspond exactly with that which will eventually be published in the 18th adaptation. However, as the only information which has to be recorded in the HEDSET is the correct number of the S phrases and these numbers will not change, submitters should ignore any minor inconsistencies in wording and simply concentrate on recording the correct number of the S phrases

The list of S phrases includes the new S phrases (they are marked with *) which are expected to be introduced in the 18th adaptation. Submitters are free to enter the number corresponding to these phrases from the date of the publication in the Official Journal. The list includes the S phrases which are

expected to be deleted as a part of the 18th adaptation (marked with +). Submitters are advised not to use these S phrases.

Text - enter the appropriate text in the S-phrases (5,6,14,23,28,40,42,43,47,48 ....) and combination of S phrases

Remarks: Give further information such as name of the regulation, the country, and the source of information.

1.6.2 Classification

The data compiler are asked to enter within this chapter the Classification of the substance. The classification may be different to the labelling.
The classification of the substance, if any, has to be given by entries of the category of danger and by the qualifying risk phrase(s). Each category of danger and accompanying risk phrase(s) has be laid down in a separate record using the multt-entry facilities.

Classification - complete using one of the following glossary codes

Contents
as in Directive 67/548/EEC
no classification required (no dangerous properties)
no classification required (no data available)
other, (as in legislation)
provisionally by manufacturer or importer

Category of Danger - complete using one of the following glossary codes

Contents
carcinogenic, category 1
carcinogenic, category 2
carcinogenic, category 3
corrosive
dangerous for the environment
explosive
extremely flammable
flammable
harmful
highly flammable
irritant
mutagenic, category 1
mutagenic, category 2
mutagenic, category 3
other (indicate the category of danger)
oxidizing
sensitising
toxic
toxic for reproduction, category 1
toxic for reproduction, category 2

toxic for reproduction, category 3
very toxic

R-Phrases

Use the R-phrases prescribed by Annex III of the Council Directive 67/548/EEC of 27 June 1967. If the substance is produced outside or exported from the Community, then indicate R-phrases which correspond to Directive 67/548/EEC, if available.

R-phrases - complete using the following glossary codes

Code	
R 1	Explosive when dry
R 2	Risk of explosion by shock, friction, fire or other sources of ignition
R 3	Extreme risk of explosion by shock, friction, fire or other sources of ignition
R 4	Forms very sensitive explosive metallic compounds
R 5	Heating may cause an explosion
R 6	Explosive with or without contact with air
R 7	May cause fire
R 8	Contact with combustible material may cause fire
R 9	Explosive when mixed with combustible material
R 10	Flammable
R 11	Highly flammable
R 12	Extremely flammable
R 13+	Extremely flammable liquefied gas
R 14	Reacts violently with water
R 14/15	Reacts violently with water, liberating extremely flammable gases
R 15	Contact with water liberates extremely flammable gases
R 15/29	Contact with water liberates toxic, extremely flammable gas
R 16	Explosive when mixed with oxidizing substances
R 17	Spontaneously flammable in air
R 18	In use, may form flammable/explosive vapour-air mixture
R 19	May form explosive peroxides
R 20	Harmful by inhalation
R 20/21	Harmful by inhalation and in contact with skin
R 20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R 20/22	Harmful by inhalation and if swallowed
R 21	Harmful in contact with skin
R 21/22	Harmful in contact with skin and if swallowed
R 22	Harmful if swallowed
R 23	Toxic by inhalation
R 23/24	Toxic by inhalation and in contact with skin
R 23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R 23/25	Toxic by inhalation and if swallowed
R 24	Toxic in contact with skin
R 24/25	Toxic in contact with skin and if swallowed
R 25	Toxic of swallowed
R 26	Very toxic by inhalation
R 26/27	Very toxic by inhalation and in contact with skin
R 26/27/28	Very toxic by inhalation, in contact with skin and if swallowed
R 26/28	Very toxic by inhalation and if swallowed
R 27	Very toxic in contact with skin

R 27/28	Very toxic in contact with skin and if swallowed
R 28	Very toxic if swallowed
R 29	Contact with water liberates toxic gas
R 30	Can become highly flammable in use
R 31	Contact with acids liberates toxic gas
R 32	Contact with acids liberates very toxic gas
R 33	Danger of cumulative effects
R 34	Causes burns
R 35	Causes severe burns
R 36	Irritating to eyes
R 36/37	Irritating to eyes and respiratory system
R 36/37/38	Irritating to eyes, respiratory system and skin
R 36/38	Irritating to eyes and skin
R 37	Irritating to respiratory system
R 37/38	Irritating to respiratory system and skin
R 38	Irritating to skin
R 39	Danger of very serious irreversible effects
R 39/23	Toxic: danger of very serious irreversible effects through inhalation
R 39/23/24	Toxic: danger of very serious irreversible effects through inhalation and in contact with skin
R 39/23/24/25	Toxic: danger of very serious irreversible effects through in halation, in contact with skin and if swallowed
R 39/23/25	Toxic: danger of very serious irreversible effects through inhalation and if swallowed
R 39/24	Toxic: danger of very serious irreversible effects in contact with skin
R 39/24/25	Toxic: danger of very serious irreversible effects in contact with skin and if swallowed
R 39/25	Toxic: danger of very serious irreversible effects if swallowed
R 39/26	Very toxic: danger of very serious irreversible effects through inhalation
R 39/26/27	Very toxic: danger of very serious irreversible effects through inhalation and in contact with skin
R 39/26/27/28	Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R 39/26/28	Very toxic: danger of very serious irreversible effects through inhalation and if swallowed
R 39/27	Very toxic: danger of very serious irreversible effects in contact with skin
R 39/27/28	Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed
R 39/28	Very toxic: danger of very serious irreversible effects if swallowed
R 40	Possible risks of irreversible effects
R 40/20	Harmful: possible risk of irreversible effects through inhalation
R 40/20/21	Harmful: possible risk of irreversible effects through inhalation and in contact with skin
R 40/20/21/22	Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed
R 40/20/22	Harmful: possible risk of irreversible effects through inhalation and if swallowed
R 40/21	Harmful: possible risk of irreversible effects in contact with skin
R 40/21/22	Harmful: possible risk of irreversible effects in contact with skin and if swallowed
R 40/22	Harmful: possible risk of irreversible effects if swallowed
R 41	Risk of serious damage to eyes
R 42	May cause sensitization by inhalation
R 42/43	May cause sensitization by inhalation and skin contact

R 43	May cause sensitization by skin contact
R 44	Risk of explosion if heated under confinement
R 45	May cause cancer
R 46	May cause heritable genetic damage
R 47+	May cause birth defects
R 48	Danger of serious damage to health by prolonged exposure
R 48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R 48/20/21	Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin
R 48/20/21/22	Harmful: danger of serious damage to health by longed exposure through inhalation. in contact with skin and if swallowed
R 48/20/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R 48/21	Harmful: danger of serious damage to health by prolonged exposure in contact with skin
R 48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R 48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed
R 48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation
R 48/23/24	Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin
R 48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R 48/23/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R 48/24	Toxic: danger of serious damage to health by prolonged exposure in contact with skin
R 48/24/25	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R 48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed
R 49	May cause cancer by inhalation
R 50	Very toxic to aquatic organisms
R 5053*	Very toxic to aquatic organisms, may cause long-term adverse effects the aquatic environment
R 51	Toxic to aquatic organisms
R51/53*	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R 52	Harmful to aquatic organisms
R 52/53*	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R 53	May cause long-term adverse effects in the aquatic environment
R 54	Toxic to flora
R 55	Toxic to fauna
R 56	Toxic to soil organisms
R 57	Toxic to bees
R 58	May cause long-term adverse effects in the environment
R 59	Dangerous for the ozone layer
R60*	May impair fertility
R61*	May cause harm to unborn child
R62*	Possible risk of impaired fertility
R63*	Possible risk of harm to unborn child
R64*	May cause harm to breastfed babies

The R phrases above are generally based upon those appearing in the 12th adaptation to technical progress to Directive 67/548/EEC (O.J., L 180 08.07.1991, p. 1) The 18th adaptation to technical, progress, due to be published in the first half of 1993 will amend or delete some existing R phrases and add additional R phrases.

Nevertheless, it is possible that the wording of the R phrases given above, will not correspond exactly with that which will eventually be published in the 18th adaptation. However, as the only information which has to be recorded in the HEDSET is the correct number of the R phrases and these numbers will not change, submitters should ignore any minor inconsistencies in wording and simply concentrate on recording the correct number of the R phrases

The list of R phrases includes the new R phrases (they are marked with *) which are expected to be introduced in the 18th adaptation. Submitters are free to enter the number corresponding to these phrases from the date of the publication in the Official Journal. The list includes the R phrases which are expected to be deleted as a part of the 18th adaptation (marked with +). Submitters are advised not to use these R phrases.

Remarks: Give further information such as name of R-Phrases, the regulation, the country, and the source of information.

1.7 Use Pattern

Data on use pattern have to be given by assigning them to 4 main types according to their exposure relevance, 15 industrial categories and 55 use categories.

If information for other countries is available, input it by using the multi-entry programme with the name of the country in the remarks field.
If available, give an estimation of different uses in percentage terms.

EXAMPLE (Screen lay-out)

Hedset for the Council Regulation on the Evaluation and Control
of Existing substances and the OECD Existing Chemicals Programme

EINECS-No : 200-000-2 CAS-No : 50-00-0
IUPAC-Name : Formaldehyde
Source : XYZ-Company Date : 15/01/93

1.7 Use Pattern---------- 3/ 9----

ID HEDSET Date 16/01/93 Freetext

Type of Use	**Category**
type	Used in close system
industrial	Chemical industry: used in synthesis
use	Intermediates
use	Pharmaceuticals
type	Non dispersive use
industrial	Personal and domestic use
use	Cleaning/washing agents and disinfectants
industrial	Leather processing industry
use	Non agricultural pesticides

50-00-0

(G) Enter category

Type of Use - complete using **EACH** of following terms (Use F5 for subsequent entries)

Categories for **"Type of Use"**

Contents
Industrial
type
use

Use in closed systems

A substance should be assigned only to this category if it remains within a reactor or is transferred from vessel to vessel through closed pipework and therefore accidental spillage is the only likely cause for human exposure or environmental contamination.

These intermediates are classified in one of the following 3 categories:

- non-isolated intermediates (restricted to the reaction vessel and its dedicated equipment)

- isolated intermediates stored on-site under controlled conditions

- isolated intermediates with controlled transport

A typical example is phosgene which will be used only under these conditions.

Substances that are used in closed systems but might be released into the environment after use, sometimes in considerable quantities, or where significant discharges into the environment cannot be excluded during production and use, should be assigned to the "Non dispersive use" or even "Wide dispersive use" categories.

Typical examples in the latter case are CFC's used as cooling agents or hydraulic fluids.

Use resulting in inclusion into or onto matrix

Use consisting of inclusion into or onto matrices means all processes where chemicals are incorporated into products or articles from which they would not be released into the environment. Examples are the inclusion of plasticizers in plastics, additives such as pigments or dyes in plastics or fibres and catalysts in coating materials.

Non dispersive use

Non dispersive use refers to chemicals which are used in such a way that only certain groups of workers, with the knowledge of the processes, come into contact with these chemicals. Workers are normally aware of the procedures to protect themselves through the use of personal or technical protective measures. The employer should also take the necessary steps to protect the environment against exposure. Thus, exposure to these chemicals will be limited.

These chemicals may also be discharged into the environment from point sources. Quantities discharged will be limited due to protective measures such as waste water sewage treatment plants or air filters.

Wide dispersive use

The term "wide dispersive use" should be used for a wide range of activities particularly where end users come into contact with the products.

Examples are detergents, cosmetics, disinfectants, solvents in household paints

Categories for type - complete using one of the following glossary codes

Contents
Non dispersive use
Use in closed systems
Use resulting in inclusion into or onto matrix
Wide dispersive use

Categories for the type **"Industrial"**

These 15 categories represent almost all industrial uses for chemicals and could serve for setting up exposure scenarios with regard to the designated use of a substance.

Categories for the type **"Industrial"**- complete using the following glossary codes

Contents
Agricultural industry e.g. Pesticides, fertilizers
Basic chemical industry: basic chemicals e.g. Solvents, pH-regulating agents (acids, alkalis)
Chemical industry: chemicals used in synthesis e.g. Intermediates (including monomers), process regulators
Electrical/electronic engineering industry e.g. Electrolytes, semiconductors. Not: galvanics, electroplating agents
Fuel industry e.g. Gasoline, colouring agents, fuel additives, antiknock agents
Leather processing industry e.g. Dyestuffs, tanning auxiliaries
Metal extraction, refining and processing industry e.g. Heat transferring agents, electroplating agents
other (indicate the this category)
Paints, lacquers and varnishes industry e.g. Solvents, viscosity adjusters, dyestuffs

Paper, pulp and board industry e.g. Dyestuffs, toners
Personal and domestic use e.g. Consumer products such as detergents (including additives), cosmetics, non-agricultural pesticides for domestic use
Photographic industry e.g. Anti fogging agents, sensitizers
Polymers industry e.g. Stabilizers, softeners, anti static agents, dyestuffs
Public domain e.g. Professional products used in public areas such as non-agricultural pesticides, cleaning agents
Textile processing industry e.g. Dyestuffs, flame retardants

Categories for the type **"Use"**- complete using the following glossary codes

Contents
Absorbents and Adsorbents
Adhesive, binding agents
Aerosol propellants
Anti-condensation agents
Anti-freezing agents
Anti-set-off and anti-adhesive agents
Anti-static agents
Bleaching agents
Cleaning/washing agents and disinfectants
Colouring agents
Complexing agents
Conductive agents
Construction materials additives
Corrosion inhibitors
Cosmetics
Dustbinding agents
Electroplating agents
Explosives
Fertilizers
Fillers
Fixing agents
Flame retardants and fire preventing agents
Flotation agents
Flux agents for casting
Foaming agents
Food/foodstuff additives
Fuel
Fuel additives
Heat transferring agents
Hydraulic fluids and additives
Impregnation agents
Insulating materials
Intermediates (give description in the remarks field)
Laboratory chemicals
Lubricants and additives
Non-agricultural pesticides,
Odour agents
other (indicate the this category)
Oxidizing agents
pH-regulating agents
Pesticides
Pharmaceuticals

Photochemicals
Process regulators
Reducing agents
Reprographic agents
Semiconductors
Softeners
Solvents
Stabilizers
Surface-active agents
Tanning agents
Viscosity adjusters
Vulcanizing agents
Welding and soldering agents

Remarks - give further information of the main categories, industrial categories and use categories in case the chemical is used in consumer products, indicate functions, weight fraction of the chemical and form of product as marketed (e.g. aerosol, powder or liquid).

1.8 Occupational exposure limit value

Indicate the type of the occupational exposure limit value If a value does not exist give the hygiene standard of the producer company if available, or enter any monitoring data in the free text fields, see also item 5.11.

Exposure limit value

a) **Type of** Occupational Exposure **Limit** Values - complete using one of the following glossary codes

Contents
BAT (DE)
MAC (Japan)
MAC (NL)
MAK (DE)
MEL (UK)
OEL (EEC)
OES (UK)
other (indicate the type)
TLV (US)
TRK (DE)

b) **Numerical value** - occupational exposure limit value

c) **Unit of measurement** - complete using one of the following glossary codes

Contents
%
µg/l
µg/m^3
mg/g
mg/m^3
ml/m^3
other (indicate the unit of measurement)

Short term exposure limit value

a) **Numerical value** - short term exposure limit value

b) **Unit of measurement** - complete using one of the following glossary codes

Contents
%
µg/l
µg/m^3
mg/g
mg/m^3
ml/m^3
other (indicate the unit of measurement)

c) **Numerical value** - length of exposure period

d) **Time schedule** - complete using one of the following glossary codes

Contents
hours
minutes

e) **Frequency -** Numerical value (of exposure per shift)

Remarks - give detailed information on any monitoring data, expressed in an appropriate statistical form, (e.g. geometric mean and standard deviation), related to production processes or professional use. Details of the requirement for any technical or personal protective equipment could also be entered in the free text field.

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

1.9 Sources of exposure

Describe sources of potential human (other than concentration of chemicals in the workplace and indoor environment, see 5.11) or environmental exposure including emission data (e.g. quantities per media with information such as time dimensions of release, indication of type of release (e.g. point source of diffuse), type of estimating (e.g. average or worst case) uncertainties in estimation), if available for all phases of the life cycle of the chemical including manufacturing and user areas.

Indicate the production process briefly, number of sites of manufacture, and the basis for concluding that the process is "closed", if applicable.

If this information is available for more than one country, input it by using the multi-entry programme with the name of the country in the remarks field.

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

1.10 Additional Remarks - give further information e.g. options for disposal, information on transport (mode, quantity and frequency, and control measures during transport)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2. Physical-Chemical Data

2.1 Melting point

Value (in degree Centigrade, other units must be converted)

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of the melting point or the lower limit of the range

c) **Upper value** - Upper value of the range of the melting point

Decomposition - complete using one of the following glossary codes

Contents
ambiguous
no
yes

Sublimation - complete using one of the following glossary codes

Contents
ambiguous
no
yes

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.1
OECD Guide-line 102
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.2 Boiling point

Value (in degree Centigrade, other units must be converted)

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of boiling point or the lower limit of the range

c) **Upper value** - Upper value of the range of the boiling point

Pressure

a) **Numerical** - pressure value

b) **Unit** - complete using one of the following glossary codes

Contents
hPa (other units must be converted)

Decomposition - complete using one of the following glossary codes

Contents
ambiguous
no
yes

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.2
OECD Guide-line 103
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.3 Density

Type - complete using one of the following glossaries

Contents
bulk density
density
relative density

Value

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of density or the lower limit of the range

c) **Upper value** - Upper value of the range of the density

d) **Unit** - complete using one of the following glossary codes

Contents
g/cm^3
kg/m^3

Temperature - fill in the numerical value of temperature in degree Centigrade (other units must be converted)

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.3
OECD Guide-line 109
other

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.4 Vapour Pressure

Value

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of vapour pressure or the lower limit of the range

c) **Upper value** - Upper value of the range of the vapour pressure

d) **Unit** - complete using one of the following glossary codes

Contents
hPa (other units must be converted)

Temperature - fill in the numerical value of temperature in degree Centigrade (other units must be converted)

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.4
OECD Guide-line 104
other (calculated) (give an explanation
other measured (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.5 Partition Coefficient (Log_{10} Pow)

Log Pow (logarithm to base 10)

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of the partition coefficient or lower limit for the range

c) **upper value** - upper value of the range of the partition coefficient

Temperature - fill in the numerical value of temperature in degree Centigrade (other units must be converted)

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.8
OECD Guide-line 107
OECD Guide-line 117
other (calculated)
other (measured)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.6 Water solubility

Value

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of water solubility or the lower limit of the range

c) **Upper value** - Upper value of the range of the water solubility

d) **Unit** - complete using one of the following glossary codes

Contents
g/l
mg/l
other (give an explanation)
Vol%

Temperature - fill in the numerical value of temperature in degree Centigrade (other units must be converted)

pH value

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of pH or the lower limit of the range

c) **Upper value** - Upper value of the range of pH

d) **Concentration Numerical** - value at which the pH is pleasured

e) **Unit** - complete using one of the following glossary codes

Contents
g/l
mg/l
other (give an explanation)
Vol%

f) **Temperature** - fill in the numerical value of temperature in degree Centigrade (other units must be converted)

pKa Value - numerical pKa value at 25 °C

Description - complete using one of the following glossary codes

Contents
miscible
not soluble
of high solubility
of low solubility
of very high solubility
of very low solubility
slightly soluble
soluble

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.6
OECD Guide-line 105
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.7 Flash point

Value (in degree Centigrade, other units must be converted)

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes

Contents	
<	>
<=	>=
=	ca.

b) **value** - fill in the numerical value of the flash point

Type of the test - complete using one of the following glossary codes

Contents
closed cup
open cup
other (give an explanation)

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.9
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.8 Auto Flammability

Value (in degree Centigrade, other units must be converted)

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank **-** complete using one of the following glossary codes

Contents

<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of the auto flammability or the lower limit of the range

c) **Upper value** - Upper value of the range of the auto flammability

Pressure - value of the numerical value

a) **Unit** - complete using one of the following glossary codes

Contents
hPa (other units must be converted)

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.15
Directive 84/449/EEC, A.16
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.9 Flammability

Results - complete using one of the following glossary codes

Contents
contact with water liberates highly flammable gases
extremely flammable
extremely flammable-liquefied gas
flammable
highly flammable
non flammable
other (give an explanation)
spontaneously flammable in air

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.10
Directive 84/449/EEC, A.11
Directive 84/449/EEC, A.12
Directive 84/449/EEC, A.13
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.10 Explosive Properties

Result - complete using one of the following glossary codes

Contents
explosive under influence of a flame
more sensitive to friction than m-dinitrobenzene
more sensitive to shock than m-dinitrobenzene
not explosive
other (give an explanation)

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.14
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.11 Oxidizing Properties

Result - indicate the max. burning rate of the test substance in the remarks field - complete using one of the following glossary codes

Contents
maximum burning rate equal or higher than reference mixture
no oxidizing properties
other (describe the results)
vigorous reaction in preliminary test

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, A.17
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes

Contents
no
no data
yes

Remarks - give further information (e.g. on test method, test results, test validation, etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

2.12 Additional Remarks

Remarks - give further information on other test data (e.g. surface tension, fat solubility, particle size etc.)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3 Environmental Fate and Pathway

3.1 Stability

3.1.1 Photodegradation

Type - complete using one of the following glossary codes:

Contents
air
other (give an explanation: e.g. plant surface, silica gel and so on)
soil
water

Light source - complete using one of the following glossary codes:

Contents
other (give an explanation)
sun light (give detailed information in the remarks field about intensity, time of exposure, latitude, time of year, atmospheric cover and other major variables which affect incident light)
Xenon lamp

Light spectrum

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of wave length or the lower limit of the range, values should be given in nanometer (other units must be converted)

c) **upper value** - fill in the upper limit of the range

Relative Intensity based on intensity of sunlight.
If artificial light is used give relationship of the light intensity employed to that of sunlight; the data on sunlight has to be given in the remarks field (see explanation above in the field "Light source")

a) **Exactness,** if the range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of relative intensity or the lower limit of the range

c) Upper value - fill in the upper limit of the range

Spectrum of substance

If the substance absorbs light at wavelength > 295 nm give data on the strongest absorption (lambda(max.) [>295nm] and epsilon [max.]) or when there is no absorption maximum at > 295nm, give absorption coefficient at 295 nm (epsilon[295 nm])

Concentration of substance

a) **value** - fill in the numerical value of concentration

b) **Unit** - complete using one of the following glossary codes:

Contents
g/l
mg/l
mmol/l
mol/l

Temperature - fill in the numerical value of temperature in degree Centigrade (other units must be converted)

DIRECT PHOTOLYSIS

t1/2 (Halflife)

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of half life or the lower limit of the range

c) **upper value** - fill in the upper limit of the range of the half life

d) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)
month
year(s)

Degradation (in percentage terms weight/weight)

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of degradation or the lower limit of the range

c) **upper value** - fill in the upper limit of the range of the degradation

d) **value** - fill in the numerical value of exposure period

e) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)
month
year(s)

Quantum yield - fill in the numerical value of quantum yield [e.g. 0.00 - 1.00]

INDIRECT PHOTOLYSIS

Type of sensitizer - complete using one of the following glossary codes:

Contents
natural water (give information on source and so on in the remarks field)
NO_3
O_3
OH
other (give an explanation)
water with additives (give information on additives [e.g. humic acids, acetone] in the remarks field)

Concentration of sensitizer

a) **value** - fill in the numerical value of concentration

b) **Unit** - complete using one of the following glossary codes:

Contents
mg/l
molecule/cm^3

Rate constant (radical)

a) **Exactness** - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

Value - fill in the value of rate constant in cm3/molecule * sec

Degradation (in percentage terms)

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of degradation or the lower limit of the range

c) **upper value** - fill in the upper limit of the range of the degradation

d) **value** - fill in the numerical value of exposure period

e) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)
month
year(s)

Method - complete using one of the following glossary codes:

Contents
EPA Guide-line subdivision N 161-2 (water)
EPA Guide-line subdivision N 161-3 (soil)
EPA Guide-line subdivision N 161-4 (air)
OECD Guide-line, draft
other (calculated) (give an explanation e.g. according to Atkinson [version of program, year(s)..])
other (measured) (give an explanation)

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, on validity of the test and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.1.2 Stability in Water

Type - complete using one of the following glossary codes:

Contents
abiotic (hydrolysis)
biotic (sediment)

t1/2 (Half life) at pH 4, 7, 9 or at a given pH

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of half life or the lower limit of the range

c) upper value - fill in the upper limit of the range the half life

d) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)
month
year(s)

e) **Temperature** - fill in the numerical value of temperature in degree centigrade (other units must be converted)

f) **value** - fill in the numerical value of pH

Degradation

a) **pH** - fill in the numerical value of pH

b) **Temperature** - fill in the numerical value of temperature in degree centigrade (other units must be converted)

c) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

d) **value or lower value** - fill in the numerical value of degradation or the lower limit of the range

e) **upper value** - fill in the upper limit of the range the degradation

f) **value** - fill in the numerical value of exposure time

g) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)
month
year(s)

Degradation products - fill in CAS number, name and percentage in the free text fields

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, C 10
OECD Guide-line 111
other (give an explanation)

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, validity of the test and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.1.3 Stability in soil

Type - complete using one of the following glossary codes:

Contents
field trial
laboratory
other

Radiolabel - complete using one of the following glossary codes:

Contents
no
no data
yes

Concentration

a) **Value** - fill in numerical value

b) **Unit** - complete using one of the following glossary codes:

Contents
mg/kg
ppm

Soil temperature - numerical value of the soil temperature in degree centigrade (other units must be converted)

Soil humidity

a) **Value** - fill in the numerical value of soil humidity

b) **Unit** - complete using one of the following glossaries

Contents
g water/100g soil dry weight
other (give an explanation)

Soil classification - complete using one of the following glossary codes:

Contents
DIN19863
NF X31-107
other (give an explanation)
USDA

Year - fill in the year of publication or update of the Method used

Content of Clay, silt and sand %

a) **Exactness,** if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - give content of clay, silt and sand in the soil in percentage terms or lower limit of the range

c) **upper value** - fill in the upper limit of the range

Organic carbon

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - give content of organic carbon in the soil in percentage terms or lower limit of the range

c) **upper value** - fill in the upper limit of the range of organic carbon

pH

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - give numerical value of pH in the soil or lower limit of the range

c) **upper value** - fill in the upper limit of the range of pH

Cation exchange capacity

a) **Exactness** - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value** - give numerical value of cation exchange capacity of the soil

c) **Unit** - complete using one of the following glossary codes:

Contents
meq/100 g soil dry weight
other (give an explanation)

Microbial biomass

a) **Exactness** - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **numerical value** - give content of microbial biomass of the soil

c) **Unit** - complete using one of the following glossary codes:

Contents
mg biomass/100 g soil dry weight
other (give an explanation)

Dissipation time DT50/DT90 (time in which 50%/90% of the substance is dissipated)

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b)**value or lower value** - fill in the numerical value of DT50/DT90 or the lower limit of the range

c) **upper value** - fill in the upper limit of the range of DT50/DT90

d) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)
month
year(s)

Dissipation

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of dissipation or the lower limit of the range

c) **upper value** - fill in the upper limit of the range of dissipation

d) **numerical value** - fill in the numerical value of exposure period

e) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)
month
year(s)

Method - complete using one of the following glossary codes:

Contents
OECD Guide-line 304A
other (give an explanation)

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, validity of the test and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first

3.2 Monitoring Data (Environment)

Type of measurement - complete using one of the following glossary codes:

Contents
background concentration
concentration at contaminated site
other

Media - complete using one of the following glossary codes:

Contents
air
biota
drinking water
food
ground water
other
sediment
soil
surface water

Note that Data on Biological Effects Monitoring including Biomagnification, and Biotransformation and Kinetics in Environmental Species is to be reported in section 4.7 and 4.8 respectively. Nonetheless concentration in various biota should be reported here. Data on concentrations in the work place or indoor environment should be reported under item 5.11.

Remarks - Give detailed information, e.g. concentration of the chemical, location and date of measurement. Enter negative data also here. If available enter an indication of measured exposure levels expressed in an appropriate statistical form (e.g. geometric mean and standard deviation).

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.3 Transport and Distribution between environmental compartments including estimated environmental concentrations and distribution pathways

3.3.1 Transport

Type - complete using one of the following glossary codes

Contents
adsorption
desorption
other
volatility

Media - complete using one of the following glossary codes:

Contents
other
soil - air
water - air
water - soil

Method - complete using one of the following glossary codes:

Contents
other (give an explanation)

Year - fill in the year of publication or update of the Method used

Results - describe the results for the transport between the compartments involved

Remarks - give further information (e.g. on test method, test results, validity of the test and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.3.2 Distribution

Media - complete using one of the following glossary codes:

Contents
air - biota
air - biota - sediment(s) - soil - water
other (give an explanation)
soil - biota
water - air
water - biota
water - soil

Method - complete using one of the following glossary codes:

Contents
Calculation according Mackay, Level I
Calculation according Mackay, Level II
Calculation according Mackay, Level III
Calculation according Mackay, Level IV
other (calculation) (give an explanation)
other (measurement) (give an explanation)

Year - fill in the year of publication or update of the Method used

Results - describe the results for the distribution between the compartments involved in the free text field (RM).

Remarks - give further information (e.g. on test method, test results, validity of the test and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.4 Mode of Degradation in Actual Use

Remarks - describe the main mode of degradation e.g.. hydrolysis, photodegradation in actual use (rather than under experimental conditions)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.5 Biodegradation

Type - complete using one of the following glossary codes:

Contents
aerobic
anaerobic

Inoculum - complete using one of the following glossary codes:

Contents	
acitvated sludge, domestic	
acitvated sludge, industrial, adapted	
acitvated sludge, industrial, non-adapted	
acitvated sludge, non-adapted	
Acrostalagmus sp.	Fungi
activated sludge	
activated sludge, adapted	
activated sludge, domestic, adapted	
activated sludge, domestic, non-adapted	
activated sludge, industrial	
Aerobacter sp.	Bacteria
Aeromonas hydrophila	Bacteria
Aeromonas sp.	Bacteria
Agrobacterium sp.	Bacteria
Alcaligenes sp.	Bacteria
Alpidium sp.	Protozoa
Anacystis aeruginosa	Bacteria
Anacystis sp.	Bacteria
anaerobic bacteria	
anaerobic micro-organisms	
anaerobic sludge	
Arthrobacter sp.	Bacteria
Arthrobacter terregens	Bacteria
Aspergillus niger	Fungi
Aspergillus sp.	Fungi
Aureobasidium sp.	Fungi
Azobacter sp.	Bacteria
Azospirillum brasilense	Bacteria
Azospirillum sp.	Bacteria
Azotobacter sp.	Bacteria
Bacillus cirroflagellosus	Bacteria
Bacillus sp.	Bacteria
Bacillus stearothermophilus	Bacteria
Bacillus subtilis	Bacteria
Bacillus thuringiensis	Bacteria
Brevibacterium sp.	Bacteria
Candida albicans	Fungi
Candida boidinii	Fungi
Candida sp.	Fungi
Candida utilis	Fungi
Caulobacter sp.	Bacteria
Chilomonas paramecium	Protozoa
Chilomonas sp.	Protozoa
Citrobacter sp.	Bacteria, soil

Claviceps sp.	Fungi
Clitocybe nebularis	Fungi
Clonostachys sp.	Fungi
Clostridium sordellii	Bacteria
Clostridium sp.	Bacteria
Colpidium campylum	Protozoa
Corynebacaterium sp.	Bacteria
Cylindrocardon sp.	Fungi
domestic sewage	
domestic sewage, adapted	
domestic sewage, non-adapted	
Endomycopsis fibuligera	Fungi
Endomycopsis sp.	Fungi
Enterobacteria sp	Bacteria
Entosiphon sp.	Protozoa
Entosiphon sulcatum	Protozoa
Escherichia coli	Bacteria
Escherichia sp.	Bacteria
Euglena sp.	Protozoa
Euplotes sp.	Protozoa
Flavobacterium sp.	Bacteria
Fusarium lini	Fungi
Fusarium semitectum	Fungi
Fusarium sp.	Fungi
Geotrichum sp.	Fungi
Hansenula glucozyma	Fungi
Hansenula sp.	Fungi
Helminthosporium sp.	Fungi
industrial sewage	
industrial sewage, adapted	
industrial sewage, non-adapted	
Klebsiella sp.	Bacteria
Lactobacillus sp.	Bacteria
Lepista nuda	Fungi
Lycoperdum mammaeforme	Fungi
Lycoperdum piriforme	Fungi
Lycoperdum sp.	Fungi
Macrolepiota procera	Fungi
Macrolepiota sp.	Fungi
Micrococcus sp.	Bacteria
Microcystis aeruginosa	Bacteria
Microcystis sp.	Bacteria
Microspora canis	Fungi
Mucor sp.	Fungi
Mycobacterium sp.	Bacteria
Mycoplana sp.	Bacteria
Myrothecium sp.	Fungi
Nitrobacter sp.	Bacteria
Nitrosomonas sp.	Bacteria
Nocardia resticta	Bacteria
Nocardia sp.	Bacteria
Olomerella sp.	Fungi
other (give an explanation)	
other bacteria	
other fungi,	
other protozoa	

Paecilomyces sp.	Fungi
Paramecium caudatum	Protozoa
Paramecium sp.	Protozoa
Pavlova sp.	Protozoa
Penicillium sp.	Fungi
Periconia prolifica	Fungi
Periconia sp.	Fungi
Phialophora cinerescens	Fungi
Phialophora sp.	Fungi
Phormidium tenue	Bacteria (filamentous cyanobacteria)
Photobacterium phoshoreum	Bacteria
Photobacterium sp.	Bacteria
predominantly domestic sewage	
predominantly domestic sewage, adapted	
predominantly domestic sewage, non-adapted	
predominantly industrial sewage	
predominantly industrial sewage, adapted	
predominantly industrial sewage, non-adapted	
Proteus mirabilis	Bacteria
Proteus sp.	Bacteria
Proteus vulgaris	Bacteria
Pseudomonas aeruginosa	Bacteria
Pseudomonas alcaligenes	Bacteria
Pseudomonas fluorescens	Bacteria
Pseudomonas putida	Bacteria
Pseudomonas sp.	Bacteria
Pseudomonas testosteroni	Bacteria
Rhizobium sp.	Bacteria
Saccharomyces cerevisiae	Fungi
Saccharomyces sp.	Fungi
Salmonella sp.	Bacteria
Salmonella typhimurium	Bacteria
Sarcina sp.	Bacteria
Sclerotinia sp.	Fungi
Scopulariopsis sp.	Fungi
Serratia sp.	Bacteria
Sporocytophaga sp.	Bacteria
Staphylococcus aureus	Bacteria
Staphylococcus sp.	Bacteria
Stemphylium sp.	Fungi
Stemphylium vesicarium	Fungi
Streptococcus faecalis	Bacteria
Streptococcus lactus	Bacteria
Streptococcus sp.	Bacteria
Streptomyces antibiotica	Bacteria
Streptomyces griseus	Bacteria
Streptomyces sp.	Bacteria
Synechococcus elongatus	Bacteria (Cyanobacteria)
Synechococcus sp.	Bacteria
Tetrahymena pyriformis	Protozoa
Tetrahymena sp.	Protozoa
Thiobacillus sp.	Bacteria
Torulopsis sp.	Fungi
Trichoderma mentagrophythes	Fungi
Trichoderma sp.	Fungi
Uronema parduzci	Protozoa

Uronema sp.	Protozoa
Verticillium sp.	Fungi
Vibrio fisheri	Bacteria
Vorticella sp.	Protozoa
Xanthomonas sp.	Bacteria
Xylaria	Fungi

Concentration

a) **value** - fill in the numerical value of concentration of the substance

b) **Unit** - complete using one of the following glossary codes:

Contents
µg/l
µmol/l
g/l
mg/l
mmol/l
mol/l

c) **related to** - complete using one of the following glossary codes:

Contents
COD (Chemical Oxygen Demand)
DOC (Dissolved Organic Carbon)
Test substance

Degradation

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of degradation or the lower limit of the range in percentage terms

c) **upper value** - fill in the upper limit of the range in percentage terms

d) **numerical value** - fill in the numerical value of exposure period

e) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)
month
year(s)

Degradation products - fill in CAS number, name and percentage in free text field

Results - complete using one of the following glossary codes:

Contents
inherently biodegradable
other (give an explanation)
readily biodegradable
under test condition no biodegradation observed

Kinetic (e.g. Zahn-Wellens-Test)

a) **value** - fill in the numerical value of measurement time

b) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)

c) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

d) **Value or lower value** - fill in the numerical value of degradation in percentage terms or the lower limit of the range

e) **upper value** - fill in the upper limit of the range

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, C.3
Directive 84/449/EEC, C.4
Directive 84/449/EEC, C.5
Directive 84/449/EEC, C.6
Directive 84/449/EEC, C.7
Directive 87/302/EEC, part C, p 106

Directive 87/302/EEC, part C, p 123
Directive 87/302/EEC, part C, p 99
ECETOC Anaerobic biodegradation
ISO 7824
ISO DIS 9408
ISO DIS 9439
ISO Draft, BOD Test for insoluble substances
OECD Guide-line 301 A (new version)
OECD Guide-line 301 A (old version)
OECD Guide-line 301 B
OECD Guide-line 301 C
OECD Guide-line 301 D
OECD Guide-line 301 E
OECD Guide-line 301 F
OECD Guide-line-302 A
OECD Guide-line 302 B
OECD Guide-line 302 C
OECD Guide-line 303 A
other (give an explanation)

Year - fill in the year of publication or update of the method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on.)

Remarks - give further information (e.g. on test method, test results, validity of the test and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.6 BOD_5, COD or Ratio BOD_5/COD

BOD_5 (Biochemical Oxygen Demand)

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, C 8
ISO 5815
other (give an explanation)

Year - fill in the year of publication or update of the Method used

Concentration

a) **value** - fill in the numerical value of concentration of the substance

b) **Unit** - complete using one of the following glossary codes:

Contents
µg/l
µmol/l
g/l
mg/l
mmol/l
mol/l

c) **related to** - complete using one of the following glossary codes:

Contents
COD (Chemical Oxygen Demand)
DOC (Dissolved Organic Carbon)
Test substance

BOD_5

a) **Exactness** - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **Value** - fill in the numerical value of biochemical oxygen demand in mg O_2/l (other units must be converted)

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

COD (Chemical Oxygen Demand)

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC C 9
ISO DP 6060
other (give an explanation)

Year - fill in the year of publication or update of the Method used

COD

a) **Exactness** - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **Value** - fill in the numerical value of chemical oxygen demand in mg O_2/g substance

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Ratio BOD5/COD

a) **Exactness** - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **Value** - fill in the numerical value of the BOD5/COD ratio

Remarks - give further information (e.g. on test method, test results, validity of the test and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.7 Bioaccumulation

Species - complete using one of the following glossary codes:

Contents	
Alburnus albidus costa	alborella
Alnus alburnus	bleak
Aburnus lucidus	bleak
Alburnus sp.	
Arosa pseudoharengus	lewife
Arosa mitchilli	anchovy, bay
Anguilla anguilla	eel, european; eel, yellow
Anguilla japjonica	eel, japanese
Anguilla rostrata	eel, american
Anguilla sp.	eel
Barbus barbus	barb
Brachydanio rerio	zebrafish
Brevoortia patronus	menhaden, gulf
Brevoortia tyrannus	menhaden, atlantic
Carassius auratus	goldfish
Carassius carassius	carp
Carassius vulgaris	common carp
Catostomus commersoni	sucker, white
Centropomus undecimalis	snook
Centropristis striata	bass, black sea
Clupea harengus	herring, atlantic
Colisa fasciatus	gourami, striped
Coregonus artedii	herring, lake;
Coregonus clupeaformis	whitefish, lake
Ctenopharyngodon idella	perch, shiner
Cynoscion nebulosus	seatrout
Cyprinodon sp.	minnow
Cyprinodon variegatus	minnow, sheepshead
Cyprinus auratus	goldfish
Cyprinus carassius	carp, crucian
Cyprinus carpio	carp, common; mirror carp
Cyprinus sp.	carp; carp, common
Dorosoma petenense	shad, threadfin
Esox lucius	pike, northern
Esox masquinongi	muskellunge
Esox niger	pickerel, chain
Esox sp.	
Fundulus confluentus	killifish, marsh
Fundulus diaphanus	killifish, banded
Fundulus grandis	killifish, gulf
Fundulus heteroclitus	mummichog
Fundulus jenkinsi	saltmarsh topminnow
Fundulus lucidae	killifish, spotted
Fundulus majalis	killifish, striped

Fundulus similis	killifish, longnose
Fundulus sp.	tapminnows
Gadus morhua	Cod
Gambusia affinis	mosquitofish
Gasterosteus aculeatus	stickleback, threespine
Gaus mexlaughs	
Harengula pensacolae	Sardine, scaled
Ictalurus catus	catfish, white
Ictalurus furcatus	catfish, blue
Ictalurus melas	bullhead, black
Ictalurus natalis	bullhead, yellow
Ictalurus nebulosus	bullhead, brown
Ilctalurus punctatus	catfish, channel
Ilctalurus sp.	
Idus idus	orfe, golden
Jordanella floridae	falgfish
Lagodon rhomboides	pinfish
Lebistes reticulatus	guppy
Leiostomus xanthurus	spot
Lepomis auritus	sunfish, redbreast
Lepomis cyanellus	sunfish, green
Lepomis gibbosus	sunfish, pumpkinseed
Lepomis humilis	sunfish, small
Lepomis macrochirus	sunfish, bluegill
Lepomis microlophus	sunfish, redear
Lepomis pallidus	sunfish, bluegill
Lepomis sp.	sunfish
Leuciscus cephalus	cavedano
cabeda rissa	
Leuciscus idus	orfe, golden
Leuciscus idus melanotus	orfe, golden
Leuciscus rutilus	roach
Leuciscus sp.	
Limanda aspera	sole, yellowfin
Limanda limanda	dab
Limanda sp.	
Menidia beryllina	silverside, tidewater
Menidia menidia	silverside, atlantic
Menidia peninsulae	silverside, tidewater
Menidia sp.	silversides
Micropogon undulatus	Croacker, atlantic
Micrapterus dolomieui	bass, smallmouth
Mircapterus salmoides	bass, largemouth
Mircapterus sp.	bass, sp.
Misgurnus anguillicaudatus	mud-fish
Morone chrysops	bass, white
Morone saxatilis	bass, striped
Morone sp.	
Mugil cephalus	mullet, black; mullet, striped; mullet, gray
Mugil curema	mullet, silver; mullet, white
Mugil sp.	
Notropis atherinoides	shinter, emerald
Oncorhynchus gorbuscha	salmon, pink
Oncorhynchus keta	salmon, chum
Oncorhynchus kisutch	salmon, coho
Oncorhynchus mykiss	trout, rainbow

Oncorhynchus nerka	salmon, sockeye
Oncorhynchus nerka kennerlyi	kokanee
Oncorhynchus sp.	
Oncorhynchus tschawytscha	salmon, chinook; salmon, king
Oryzias latipes	killifish, japanese; killifish, red; medaka; medaka, japanese; killifish
Osmerus mordax	rainbow
other (give an explanation)	
Parophrys vetulus	sole, english
Perca flavescens	perch, yellow
Perca fluviatilis	perch
Perca sp.	
Petromyzon fluviatilis	
Petromyzon marinus	sea lamprey
Petromyzon sp.	
Phoxinus laevis	
Phoxinus phoxinus	
Phoxinus sp.	
Pimephales notatus	minnow, bluntnose
Pimephales promelas	minnow, fathead
Pimephales sp.	
Platypoecilus maculatus	platyfish
Pleuronectes platessa	flounder
Poecilia latipinna	guppy
Poecilia retiaculata	guppy
Poecilia sp.	
Pogonias chromis	drum, black
Pomatomus saltatrix	bluefish
Pomoxis annularis	crappie, white
Pomoxis nigromaculatus	crappie, black
Prosopium williamsoni	whitefish, mountain
Pseudopleuronectes Pamericanus	flounder, winter
Ptychocheilus oregonensis	squawfish, northern
Rasbora heteromorpha	harlequin fish
Rhodeus sericeus	bitterling
Roccus americanus	perch, white
Rutilus rutilus	
Salmo aquabonita	trout, golden
Salmo clarki	trout, cutthroat
Salmo gairdneri	trout, rainbow
Salmo irideus	trout, rainbow
Salmo salar	salmon, atlantic
Salmo sp.	
Salmo trutta	trout, brown; rout sea
Salvelinus alpinus	char, artic
Salvelinus fontinalis	trout, brook
Salvelinus malma	char, dolly varden
Salvelinus namaycush	trout, lake
Salvelinus sp.	
Sardinops sagax	sardine, pacific
Sarotherodon mossambicus	Mozambique tilapia
Scardinius erythrophthalmus	
Sciaenops ocellata	rum, red
Semolitus atromaculatus	chub, creek

Sphaeroidus maculatus	puffer, northern
Stizostedion canadense	sauger
Stizostedion v. vitreum	pike, walleye
Tinca sp.	
Tinca tinca	tench
Tinca vulgaris	tench
Trutta iridea	rainbow trout

Exposure period

a) **value** - fill in the numerical value of exposure period

b) **Unit** - complete using one of the following glossary codes:

Contents
day(s)
hour(s)
minute(s)

Temperature - fill in the numerical value of temperature in Centigrade (other units must be converted)

Concentration

a) **value** - fill in the numerical value of concentration of the substance

b) **Unit** - complete using one of the following glossary codes:

Contents
µg/l
µmol/l
g/l
mg/l
mmol/l
mol/l

Bioconcentration Factor (BCF)

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **Value or lower value** - fill in the numerical value of BCF or the lower limit of the range

c) **upper value** - fill in the upper limit of the range of BCF

Elimination - complete using one of the following glossary codes:

Contents
no
no data
yes

Method - complete using one of the following glossary codes:

Contents
OECD Guide-line 305 A
OECD Guide-line 305 B
OECD Guide-line 305 C
OECD Guide-line 305 D
OECD Guide-line 305 E
other (give an explanation)

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, on validity of the test and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

3.8 Additional Remarks

Remarks - give information on topics which can not be entered for the previous topics but belong to this chapter on Environmental Fate and Pathways

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4 Ecotoxicity

4.1 Acute/Prolonged Toxicity to Fish

Type - complete using one of the following glossary codes

Contents
field observation
flow through
other (give an explanation)
semistatic
static

Species - complete using one of the following glossary codes

Contents	
Alburnus albidus costa	alborella
Alnus alburnus	bleak
Aburnus lucidus	bleak
Alburnus sp.	
Arosa pseudoharengus	lewife
Arosa mitchilli	anchovy, bay
Anguilla anguilla	eel, european; eel, yellow
Anguilla japjonica	eel, japanese
Anguilla rostrata	eel, american
Anguilla sp.	eel
Barbus barbus	barb
Brachydanio rerio	zebrafish
Brevoortia patronus	menhaden, gulf
Brevoortia tyrannus	menhaden, atlantic
Carassius auratus	goldfish
Carassius carassius	carp, crucian
Carassius sp.	carp
Carassius vulgaris	common carp
Catostomus commersoni	sucker, white
Centropomus undecimalis	snook
Centropristis striata	bass, black sea
Clupea harengus	herring, atlantic
Colisa fasciatus	gourami, striped
Coregonus artedii	herring, lake;
Coregonus clupeaformis	whitefish, lake
Ctenopharyngodon idella	perch, shiner
Cynoscion nebulosus	seatrout
Cyprinodon sp.	minnow
Cyprinodon variegatus	minnow, sheepshead
Cyprinus auratus	goldfish
Cyprinus carassius	carp, crucian
Cyprinus carpio	carp, common; mirror carp
Cyprinus sp.	carp; carp, common
Dorosoma petenense	shad, threadfin
Esox lucius	pike, northern
Esox masquinongi	muskellunge
Esox niger	pickerel, chain

Esox sp.	
Fundulus confluentus	killifish, marsh
Fundulus diaphanus	killifish, banded
Fundulus grandis	killifish, gulf
Fundulus heteroclitus	mummichog
Fundulus jenkinsi	saltmarsh topminnow
Fundulus lucidae	killifish, spotted
Fundulus majalis	killifish, striped
Fundulus similis	killifish, longnose
Fundulus sp.	tapminnows
Gadus morhua	Cod
Gambusia affinis	mosquitofish
Gasterosteus aculeatus	stickleback, threespine
Gaus mexlaughs	
Harengula pensacolae	Sardine, scaled
Ictalurus catus	catfish, white
Ictalurus furcatus	catfish, blue
Ictalurus melas	bullhead, black
Ictalurus natalis	bullhead, yellow
Ictalurus nebulosus	bullhead, brown
Ilctalurus punctatus	catfish, channel
Ilctalurus sp.	
Idus idus	orfe, golden
Jordanella floridae	falgfish
Lagodon rhomboides	pinfish
Lebistes reticulatus	guppy
Leiostomus xanthurus	spot
Lepomis auritus	sunfish, redbreast
Lepomis cyanellus	sunfish, green
Lepomis gibbosus	sunfish, pumpkinseed
Lepomis humilis	sunfish, small
Lepomis macrochirus	sunfish, bluegill
Lepomis microlophus	sunfish, redear
Lepomis pallidus	sunfish, bluegill
Lepomis sp.	sunfish
Leuciscus cephalus	cavedano
cabeda rissa	
Leuciscus idus	orfe, golden
Leuciscus idus melanotus	orfe, golden
Leuciscus rutilus	roach
Leuciscus sp.	
Limanda aspera	sole, yellowfin
Limanda limanda	dab
Limanda sp.	
Menidia beryllina	silverside, tidewater
Menidia menidia	silverside, atlantic
Menidia peninsulae	silverside, tidewater
Menidia sp.	silversides
Micropogon undulatus	Croacker, atlantic
Micrapterus dolomieui	bass, smallmouth
Mircapterus salmoides	bass, largemouth
Mircapterus sp.	bass, sp.
Misgurnus anguillicaudatus	mud-fish
Morone chrysops	bass, white
Morone saxatilis	bass, striped
Morone sp.	

Mugil cephalus	mullet, black; mullet, striped; mullet, gray
Mugil curema	mullet, silver; mullet, white
Mugil sp.	
Notropis atherinoides	shinter, emerald
Oncorhynchus gorbuscha	salmon, pink
Oncorhynchus keta	salmon, chum
Oncorhynchus kisutch	salmon, coho
Oncorhynchus mykiss	trout, rainbow
Oncorhynchus nerka	salmon, sockeye
Oncorhynchus nerka kennerlyi	kokanee
Oncorhynchus sp.	
Oncorhynchus tschawytscha	salmon, chinook; salmon, king
Oryzias latipes	killifish, japanese; killifish, red; medaka; medaka, japanese; killifish
Osmerus mordax	rainbow
other (give an explanation)	
Parophrys vetulus	sole, english
Perca flavescens	perch, yellow
Perca fluviatilis	perch
Perca sp.	
Petromyzon fluviatilis	
Petromyzon marinus	sea lamprey
Petromyzon sp.	
Phoxinus laevis	
Phoxinus phoxinus	
Phoxinus sp.	
Pimephales notatus	minnow, bluntnose
Pimephales promelas	minnow, fathead
Pimephales sp.	
Platypoecilus maculatus	platyfish
Pleuronectes platessa	flounder
Poecilia latipinna	guppy
Poecilia retiaculata	guppy
Poecilia sp.	
Pogonias chromis	drum, black
Pomatomus saltatrix	bluefish
Pomoxis annularis	crappie, white
Pomoxis nigromaculatus	crappie, black
Prosopium williamsoni	whitefish, mountain
Pseudopleuronectes Pamericanus	flounder, winter
Ptychocheilus oregonensis	squawfish, northern
Rasbora heteromorpha	harlequin fish
Rhodeus sericeus	bitterling
Roccus americanus	perch, white
Rutilus rutilus	
Salmo aquabonita	trout, golden
Salmo clarki	trout, cutthroat
Salmo gairdneri	trout, rainbow
Salmo irideus	trout, rainbow
Salmo salar	salmon, atlantic
Salmo sp.	
Salmo trutta	trout, brown; rout sea
Salvelinus alpinus	char, artic
Salvelinus fontinalis	trout, brook

Salvelinus malma	char, dolly varden
Salvelinus namaycush	trout, lake
Salvelinus sp.	
Sardinops sagax	sardine, pacific
Sarotherodon mossambicus	Mozambique tilapia
Scardinius erythrophthalmus	
Sciaenops ocellata	rum, red
Semolitus atromaculatus	chub, creek
Sphaeroidus maculatus	puffer, northern
Stizostedion canadense	sauger
Stizostedion v. vitreum	pike, walleye
Tinca sp.	
Tinca tinca	tench
Tinca vulgaris	tench
Trutta iridea	rainbow trout

Exposure period - If values for NOEC, LC0, LC50, LC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multy-entry programme.

a) **value** - fill in the numerical value of the exposure period

b) **Unit** - complete using one of the following glossary codes

Contents
day(s)
hour(s)
minute(s)

Unit of measurement for **NOEC, LCO, LC50. LC100** and other- complete using one of the following glossary codes

Contents
µg/l
µmol/l
g/l
mg/kg soil dry weight
mg/l
mmol/l
mol/l

NOEC, LC0, LC50, LC100 and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of NOEC, LC0, LC50, etc.... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. TLm, LC90 etc....

Analytical monitoring - indicate if there was an analytical control of the test substance during the test period - complete using one of the following glossary codes:

Contents
no
no data
yes

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, C.1
ISO 7346/1-3
OECD Guide-line 203
OECD Guide-line 204
other (give an explanation)

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.2 **Acute**/Prolonged **Toxicity to Aquatic Invertebrates**

Species - complete using one of the following glossary codes

Contents
Artemia salina
Artemia sp.
Asellus intermedius
Asellus sp.
Ceriodaphnia sp.
Crangon crangon
Crangon septemspinosa
Crangon sp.
Daphnia cucullata
Daphnia magna
Daphnia pulex
Daphnia pulicaria
Daphnia sp.
Elasmopus pectenicrus
Elasmopus sp.
Gammarus fasciatus
Gammarus lacustris
Gammarus minus
Gammarus olivii
Gammarus pulex
Gammarus sp.
Idotea balthica basteri
Mysidopsis bahia
Nitocra spinipes
other
other aquatic arthropod
other aquatic mollusc
other aquatic worm
other aquatic crustacea
Pagurus logicarpus
Palaemonetes pugio
Palaemonetes vulgaris
Simocephalus serrulatus
Sphaeroma serratum

Exposure period - If values for NOEC, EC0, EC50, EC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multi-entry programme.

a) **value** - fill in the numerical value of the exposure period

b) **Unit** - complete using one of the following glossary codes

Contents
day(s)
hour(s)
minute(s)

Unit of measurement - complete using one of the following glossary codes

Contents
µg/l
µmol/l
g/l
mg/kg soil dry weight
mg/l
mmol/l
mol/l

NOEC, EC0, EC50, EC100 and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of NOEC, EC0, EC50... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. EC90 and so on

Analytical monitoring - indicate if there was an analytical control of the test substance during the test period and complete using one of the following glossary codes:

Contents
no
no data
yes

Method - complete using one of the following glossary codes

Contents
Directive 84/449/EEC, C.2
ISO 6341 15
OECD Guide-line 202, part 1
other (give an explanation)

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.3 Toxicity to Aquatic Plants e.g. Algae

Species - complete using one of the following glossary codes

Contents
Agmenellum quadruplicatum
Anabaena cylindrica
Anabaena doloilum
Anabaena flos-aquae
Anabaena inaequalis
Anabaena sp.
Anabaena variabilis
Anacystis aeruginosa
Anacystis sp.
Ankistrodesmus falcatus
Ankistrodesmus minutissimus
Ankistrodesmus sp.
Chlamydomonas reinhardii
Chlamydomonas sp.
Chlorella emersonii
Chlorella fusca
Chlorella mucosa
Chlorella pyrenoidosa
Chlorella sp.
Chlorella vulgaris
Chlorococcum sp.
Cyclotella cryptica
Cyclotella sp.
Dictyosphaerium pulchellum
Dictyosphaerium sp.
Dunaliella bioculata
Dunaliella salina

Dunaliella sp.
Dunaliella tertiolecta
Euglena gracilis
Euglena sp.
Gyrodinium sp.
Haematococcus pluvialis
Haematococcus sp.
Hormidium flaccidum
Hormidium sp.
Microcystis aeruginosa
Microcystis sp.
Monoraphidium griffithii
Monoraphidium sp.
Navicula pelliculosa
Navicula seminulum
Navicula sp.
Nitella sp.
Nitscheria linearis
Nitzschia palea
Nitzschia sp.
Oscillatoria sp.
other algae
other aquatic plant
Phaeodactylum sp.
Phaeodactylum tricornutum
Phormidium tenue
Scenedesmus acutus
Scenedesmus pannonicus
Scenedesmus quadricauda
Scenedesmus sp.
Scenedesmus subspicatus
Selenastrum capricornutum
Selenastrum sp.
Skeletonema costatum
Skeletonema sp.
Spirulina platensis
Spirulina sp.
Stichococcus sp.
Synechococcus elongatus

End-point - complete using one of the following glossary codes

Contents
biomass
growth rate
other

Exposure period .- If values for NOEC, EC0, EC50, LC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multi-entry programme.

a) **value** - fill in the numerical value of the exposure period

b) **Unit** - complete using one of the following glossary codes

Contents
day(s)
hour(s)
minute(s)

Unit of measurement for **EC10**, **EC50**, **NOEC** and so on - complete using one of the following glossary codes

Contents
µg/l
µmol/l
g/l
mg/kg soil dry weight
mg/l
mmol/l
mol/l

EC0, EC10, EC50, NOEC, LOEC and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of EC10, EC50, etc.... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. EC20 and so on

Analytical monitoring - indicate if there was an analytical control of the test substance during the test period and complete using one of the following glossary codes:

Contents
no
no data
yes

Method - complete using one of the following glossary codes

Contents
Directive 87/302/EEC, part C, p 89
ISO 8692
OECD Guide-line 201
other (give an explanation)

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.4 Toxicity to Bacteria

Type - complete using one of the following glossary codes

Contents
aquatic
field
other (give an explanation)
soil

Species - complete using one of the following glossary codes

Contents	
Achromobacter sp.	Bacteria
Acrostalagmus sp.	Fungi
activated sludge	
activated sludge of a predominantly domestic sewage	
activated sludge of a predominantly industrial sewage	
activated sludge, domestic	
activated sludge, industrial	
Aerobacter sp.	Bacteria

Aeromonas hydrophila	Bacteria
Aeromonas sp.	Bacteria, soil
Agrobacterium sp.	Bacteria
Alcaligenes sp.	Bacteria
Anacystis aeruginosa	Bacteria
Anacystis sp.	Bacteria
anaerobic bacteria	
anaerobic bacteria from a domestic water treatment plant	
anaerobic sludge	
Arthrobacter sp.	Bacteria
Arthrobacter terregens	Bacteria
Aspergillus niger	Fungi
Aspergillus sp.	Fungi
Aureobasidium sp.	Fungi
Azobacter sp.	Bacteria
Azospirillum brasilense	Bacteria
Azospirillum sp.	Bacteria
Azotobacter sp.	Bacteria
Bacillus cirroflagellosus	Bacteria
Bacillus sp.	Bacteria
Bacillus stearothermophilus	Bacteria
Bacillus subtilis	Bacteria
Bacillus thuringiensis	Bacteria
Brevibacterium sp.	Bacteria
Candida albicans	Fungi
Candida boidinii	Fungi
Candida sp.	Fungi
Candida utilis	Fungi
Caulobacter sp.	Bacteria
Chilomonas paramecium	Protozoa
Chilomonas sp.	Protozoa
Citrobacter sp.	Bacteria, soil
Claviceps sp.	Fungi
Clitocybe nebularis	Fungi
Clonostachys sp.	Fungi
Clostridium sordellii	Bacteria
Clostridium sp.	Bacteria
Colpidium campylum	Protozoa
Colpidium sp.	Protozoa
Corynebacterium sp.	Bacteria
Cylindrocardon sp.	Fungi
domestic sewage	
Endomycopsis fibuligera	Fungi
Endomycopsis sp.	Fungi
Enterobacteria sp.	Bacteria
Entosiphon sp.	Protozoa
Entosiphon sulcatum	Protozoa
Escherichia coli	Bacteria
Escherichia sp.	Bacteria
Euglena sp.	Protozoa
Euplotes sp.	Protozoa
Flavobacterium sp.	Bacteria
Fusarium lini	Fungi
Fusarium sp.	Fungi
Geotrichum sp.	Fungi
Hansenula glucozyma	Fungi

Hansenula sp.	Fungi
Helminthosporium sp.	Fungi
Industrial sewage	
Klebsiella sp.	Bacteria
Lactobacillus sp.	Bacteria
Lepista nuda	Fungi
Lepista sp.	Fungi
Lycoperdum mammaeforme	Fungi
Lycoperdum piriforme	Fungi
Lycoperdum sp.	Fungi
Macrolepiota procera	Fungi
Macrolepiota sp.	Fungi
Micrococcus sp.	Bacteria
Microcystis aeruginosa	Bacteria
Microcystis sp.	Bacteria
Microspora sp.	Fungi
Mircospora canis	Fungi
Mucor sp.	Fungi
Mycobacter sp.	Bacteria
Mycoplana sp.	Bacteria
Myrothecium sp.	Fungi
Nitrobacter sp.	Bacteria
Nitrosomonas sp.	Bacteria
Nocardia resticta	Bacteria
Nocardia sp.	Bacteria
Olomerella sp.	Fungi
other bacteria,	
other fungi,	
other protozoa,	
Paecilomyces sp.	Fungi
Paramecium caudatum	Protozoa
Paramecium sp.	Protozoa
Pavlova sp.	Protozoa
Penicillium sp.	Fungi
Periconia prolifica	Fungi
Periconia sp.	Fungi
Phialophora cenerescens	Fungi
Phialophora sp.	Fungi
Phormidium sp.	Bacteria (filamentous canobacteria)
Photobacterium phoshoreum	Bacteria
Photobacterium sp.	Bacteria
Proteus mirabilis	Bacteria
Proteus sp.	Bacteria
Proteus vulgaris	Bacteria
Pseudomonas aeruginosa	Bacteria
Pseudomonas alcaligenes	Bacteria
Pseudomonas fluorescens	Bacteria
Pseudomonas putida	Bacteria
Pseudomonas sp.	Bacteria
Pseudomonas testosteroni	Bacteria
Rhizobium sp.	Bacteria
Saccharomyces cerevisiae	Fungi
Saccharomyces sp.	Fungi
Salmonella sp.	Bacteria
Salmonella typhimurium	Bacteria

Sarcina sp.	Bacteria
Sclerotinia sp.	Fungi
Scopulariopsis sp.	Fungi
Serratia sp.	Bacteria
Sporocytophaga sp.	Bacteria
Staphylococcus aureus	Bacteria
Staphylococcus sp.	Bacteria
Stemphylium sp.	Fungi
Stemphylium vesicarium	Fungi
Streptococcus faecalis	Bacteria
Streptococcus lactus	Bacteria
Streptococcus sp.	Bacteria
Streptomyces antibiotica	Bacteria
Streptomyces griseus	Bacteria
Streptomyces sp.	Bacteria
Tetrahymena pyriformis	Protozoa
Tetrahymena sp.	Protozoa
Thiobacillus sp.	Bacteria
Torulopsis sp.	Fungi
Trichoderma mentagrophythes	Fungi
Trichoderma sp.	Fungi
Uronema parduzci	Protozoa
Uronema sp.	Protozoa
Verticillium sp.	Fungi
Vibrio fisheri	Bacteria
Vibrio sp.	
Vorticella sp.	Protozoa
Xanthomonas sp.	Bacteria
Xylaria sp.	Fungi

Exposure period - If values for NOEC, EC0, EC50, EC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multi-entry programme.

a) **value** - fill in the numerical value of the exposure period
b) **Unit** - complete using one of the following glossary codes

Contents
day(s)
hour(s)
minute(s)

Unit of measurement for **EC10**, **EC50** and so on - complete using one of the following glossary codes

Contents
µg/l
µmol/l
g/l
mg/kg soil dry weight
mg/l
mmol/l
mol/l

EC0, EC10, EC50 and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of EC10, EC50... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. EC20 and so on

Analytical monitoring - indicate if there was an analytical control of the test substance during the test period and complete using one of the following glossary codes:

Contents
no
no data
yes

Method - complete using one of the following glossary codes

Contents	
Directive 87/302/EEC, part C, p 118	"Biodegradation: Activated sludge respiration inhibition test"
ETAD Fermentation tube method	"Determination of damage to effluent bacteria by the Fermentation Tube Method"
ISO 8192	
ISO 9509	
OECD Guide-line 209	"Activated Sludge, Respiration Inhibition Test"
other (give an explanation)	

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.5 Chronic Toxicity to Aquatic Organism

4.5.1 Chronic Toxicity to Fish

Species - complete using one of the following glossary codes

Contents

Aburnus albidus costa	alborella
Aburnus lucidus	bleak
Ahoy mitchilli	anchovy, bay
Alburnus sp.	
Alnus alburnus	bleak
Anguilla anguilla	eel, european; eel, yellow
Anguilla japjonica	eel, japanese
Anguilla rostrata	eel, american
Anguilla sp.	eel
Arosa pseudoharengus	lewife
Barbus barbus	barb
Brachydanio rerio	zebrafish
Brevoortia patronus	menhaden, atlantic
Brevoortia tyrannus	menhaden, atlantic
cabeda rissa	
Carassius auratus	goldfish
Carassius carassius	carp, crucian
Carassius sp.	carp
Carassius vulgaris	sucker, white
Catostomus commersoni	sucker, white
Centropomus undecimalis	snook
Centropristis striata	bass, black sea
Clupea harengus	herring, atlantic
Colisa fasciatus	gourami, striped
Coregonus artedii	herring, lake;
Coregonus clupeaformis	whitefish, lake
Ctenopharyngodon idella	perch, shiner
Cynoscion nebulosus	seatrout
Cyprinodon sp.	minnow
Cyprinodon variegatus	minnow, sheepshead
Cyprinus auratus	goldfish
Cyprinus carassius	carp, crucian
Cyprinus carpio	carp, common; mirror carp

Cyprinus sp.	carp; carp, common
Dorosoma petenense	shad, threadfin
Esox lucius	pike, northern
Esox masquinongi	muskellunge
Esox niger	pickerel, chain
Esox sp.	
Fundulus confluentus	killifish, marsh
Fundulus diaphanus	killifish, banded
Fundulus grandis	killifish, gulf
Fundulus heteroclitus	mummichog
Fundulus jenkinsi	saltmarsh topminnow
Fundulus lucidae	killifish, spotted
Fundulus majalis	killifish, striped
Fundulus similis	killifish, longnose
Fundulus sp.	tapminnows
Gadus morhua L	Cod
Gambusia affinis	mosquitofish
Gasterosteus aculeatus	stickleback, threespine
Gaus mexlaughs	
Harengula pensacolae	Sardine, scaled
Ictalurus catus	catfish, white
Ictalurus furcatus	catfish, blue
Ictalurus melas	bullhead, black
Ictalurus natalis	bullhead, yellow
Ictalurus nebulosus	bullhead, brown
Idus idus	orfe, golden
Ilctalurus punctatus	catfish, channel
Ilctalurus sp.	
Jordanella floridae	falgfish
kennerlyi	
Lagodon rhomboides	pinfish
Lebistes reticulatus	guppy
Leiostomus xanthurus	spot
Lepomis auritus	sunfish, redbreast
Lepomis cyanellus	sunfish, green
Lepomis gibbosus	sunfish, pumpkinseed
Lepomis humilis	sunfish, small
Lepomis macrochirus	sunfish, bluegill
Lepomis microlophus	sunfish, redear
Lepomis pallidus	sunfish, bluegill
Lepomis sp.	sunfish
Leuciscus cephalus	cavedano
Leuciscus idus	orfe, golden
Leuciscus idus melanotus	orfe, golden
Leuciscus rutilus	roach
Leuciscus sp.	
Limanda aspera	sole, yellowfin
Limanda limanda	dab
Limanda sp.	
Menidia beryllina	silverside, tidewater
Menidia menidia	silverside, atlantic
Menidia peninsulae	silverside, tidewater
Menidia sp.	silversides
Micrapterus dolomieui	bass, smallmouth
Micropogon undulatus	Croacker, atlantic
Mircapterus salmoides	bass, largemouth

Mircapterus sp.	bass, sp.
Misgurnus anguillicaudatus	moud-fish
Morone chrysops	bass, white
Morone saxatilis	bass, striped
Morone sp.	
Mugil cephalus	mullet, black; mullet, striped; mullet, gray
Mugil curema	mullet, silver; mullet, white
Mugil sp.	
Notropis atherinoides	shinter, emerald
Oncorhynchus gorbuscha	salmon, pink
Oncorhynchus keta	salmon, chum
Oncorhynchus kisutch	salmon, coho
Oncorhynchus mykiss	trout, rainbow
Oncorhynchus nerka	salmon, sockeye
Oncorhynchus nerka	kokanee
Oncorhynchus sp.	
Oncorhynchus tschawytscha	salmon, chinook; salmon, king
Oryzias latipes	killifish, japanese; killifish, red; medaka; medaka, japanese; killifish
Osmerus mordax	rainbow
other (give an explanation), Pamericanus	
Parophrys vetulus	sole, english
Perca flavescens	perch, yellow
Perca fluviatilis	perch
Perca sp.	
Petromyzon fluviatilis	
Petromyzon marinus	sea lamprey
Petromyzon sp.	
Phoxinus laevis	
Phoxinus phoxinus	
Phoxinus sp.	
Pimephales notatus	minnow, bluntnose
Pimephales promelas	minnow, fathead
Pimephales sp.	
Platypoecilus maculatus	platyfish
Pleuronectes platessa	flounder
Poecilia latipinna	guppy
Poecilia retiaculata	guppy
Poecilia sp.	
Pogonias chromis	drum, black
Pomatomus saltatrix	bluefish
Pomoxis annularis	crappie, white
Pomoxis nigromaculatus	crappie, black
Prosopium williamsoni	whitefish, mountain
Pseudopleuronectes	flounder, winter
Ptychocheilus oregonensis	squawfish, northern
Rasbora heteromorpha	harlequin fish
Rhodeus sericeus	bitterling
Roccus americanus	perch, white
Rutilus rutilus	
Salmo aquabonita	trout, golden
Salmo clarki	trout, cutthroat
Salmo gairdneri	trout, rainbow
Salmo irideus	trout, rainbow
Salmo salar	salmon, atlantic

Salmo sp.	
Salmo trutta	trout, brown; rout sea
Salvelinus alpinus	har, artic
Salvelinus fontinalis	rout, brook
Salvelinus malma	char, dolly varden
Salvelinus namaycush	trout, lake
Salvelinus sp.	
Sardinops sagax	sardine, pacific
Sarotherodon mossambicus	Mozambique tilapia
Scardinius erythrophthalmus	
Sciaenops ocellata	rum, red
Semolitus atromaculatus	hub, creek
Sphaeroidus maculatus	puffer, northern
Stizostedion canadense	sauger
Stizostedion v. vitreum	pike, walleye
Tinca sp.	
Tinca tinca	tench
Tinca vulgaris	tench
Trutta iridea	rainbow trout

End-point - complete using one of the following glossary codes

Contents
length of young fish
other (give an explanation),
reproduction rate
weight of young fish

Exposure period - If values for NOEC, LC0, LC50, LC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multi-entry programme.

a) **value** - fill in the numerical value of the exposure period

b) **Unit** - complete using one of the following glossary codes

Contents
day(s)
month

Unit of measurement for **LLC** (lowest lethal concentration), **NOEC**, **LOEC** and so on - complete using one of the following glossary codes

Contents
µg/l
µmol/l
g/l
mg/kg soil dry weight
mg/l
mmol/l
mol/l

LLC, NOEC, LOEC and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of LLC, NOEC, LOEC... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. EC50 and so on

Analytical monitoring - indicate if there was an analytical control of the test substance during the test period and complete using one of the following glossary codes:

Contents
no
no data
yes

Results - Give information on observed effects in the free text field (RM).

Method - complete using one of the following glossary codes

Contents
OECD Guide-line draft
other (give an explanation),

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.5.2 Chronic Toxicity to Aquatic Invertebrates

Species - complete using one of the following glossary codes

Contents
Artemia salina
Artemia sp.
Asellus intermedius
Asellus sp.
Ceriodaphnia sp.
Crangon crangon
Crangon septemspinosa
Crangon sp.
Daphnia cucullata
Daphnia magna
Daphnia pulex
Daphnia pulicaria
Daphnia sp.
Elasmopus pectenicrus
Elasmopus sp.
Gammarus fasciatus
Gammarus lacustris
Gammarus minus
Gammarus olivii
Gammarus pulex
Gammarus sp.
Idotea balthica basteri
Mysidopsis bahia
Nitocra spinipes
other
other aquatic arthropod,
other aquatic mollusc,
other aquatic worm,
other crustacea,
Pagurus logicarpus
Palaemonetes pugio
Palaemonetes vulgaris
Simocephalus serrulatus
Sphaeroma serratum

End-point - complete using one of the following glossary codes

Contents
mortality
other (give an explanation),
reproduction rate

Exposure period - If values for NOEC, EC0, EC50, EC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multi-entry programme.

a) **value** - fill in the numerical value of the exposure period

b) **Unit** - complete using one of the following glossary code

Contents
day(s)

Unit of measurement for **EC50**, **NOEC**, **LOEC** and so on - complete using one of the following glossary codes

Contents
µg/l
µmol/l
g/l
mg/kg soil dry weight
mg/l
mmol/l
mol/l

EC50, NOEC, LOEC and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of EC50, NOEC, LOEC... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. LC50 and so on

Analytical monitoring - indicate if there was an analytical control of the test substance during the test period and complete using one of the following glossary codes:

Contents
no
no data
yes

Results - Give information on observed effects in the free text field (RM).

Method - complete using one of the following glossary codes

Contents
OECD Guide-line 202, part 2
other (give an explanation),

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.6 Toxicity to Terrestrial Organism

4.6.1 Toxicity to Soil Dwelling Organism

Type - complete using one of the following glossary codes

Contents
artificial soil
filter paper
other (give an explanation),

Species - complete using one of the following glossary codes

Contents
Aleochara bilineata
Aleochara sp.
Bembidion lampros
Bembidion sp.

Caenorhabditis elegans
Caenorhabditis sp.
Eisenia foetida
Eisenia sp.
Enchytraeus albidus
Enchytraeus globuliferus
Enchytraeus sp.
Folsomia candida
Folsomia sp.
Lumbricus rubellus
Lumbricus sp.
Monhystera disjuncta
Monhystera sp.
Oniscus asellus
Oniscus sp.
Onychiurus armatus
Onychiurus sp.
Orchesella cincta
Orchesella sp.
other soil dwelling arthropod,
other soil dwelling worm,
Panagrellus redivivus
Panagrellus sp.
Porcellio scaber
Porcellio sp.
Pterostichus cuprius
Pterostichus sp.
Rhabditis oxycerca
Rhabditis sp.
Tomocerus sp.
Trachelipus rathkii
Trachelipus sp.

End-point - complete using one of the following glossary codes

Contents
mortality
other (give an explanation),
weight

Exposure period - If values for NOEC, LC0, LC50, LC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multi-entry programme.

a) **value** - fill in the numerical value of the exposure period

b) **Unit** - complete using one of the following glossary codes

Contents
day(s)
hour(s)
minute(s)

Unit of measurement for **NOEC**, **LC0**, **LC50, LC100** and so on - complete using one of the following glossary codes

Contents
mg/cm^2 filter paper
mg/kg soil dry weight
other (give an explanation)

NOEC, LC0, LC50, LC100 and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of NOEC, LC0, LC50, etc.... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. LC90 and so on

Method - complete using one of the following glossary codes

Contents
Directive 87/302/EEC, part C, p 95
OECD Guide-line 207
other (give an explanation),

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.6.2 Toxicity to Terrestrial Plants

As three species of terrestrial plants are usually investigated, input the results by using the multi-entry programme

Species - complete using one of the following glossary codes

Contents		**Category**
Avena sativa	(oat)	cat 1
Brassica alba	(mustard)	cat 2
Brassica campestris var. chinensis	(Chinese cabbage)	cat 2
Brassica napus	(rape)	cat 2
Brassica rapa	(turnip)	cat 2
Lactuca sativa	(lettuce)	cat 3
Lepidium sativum	(cress)	cat 3
Lolium perenne	(rye grass)	cat 1
Oryza sativa	(rice)	cat 1
other terrestrial plant,		
Phaseolus aureus	(mung bean)	cat 3
Raphanus sativus	(radish)	cat 2
Sorghum bicolor	(sorghum)	cat 1
Trifolium ornithopodioides	(fenugreek)	cat 3
Trifolium pratense	(red clover)	cat 3
Triticum aestivum	(wheat)	cat 1
Vicia sativa	(vetch)	cat 3

cat 1, cat 2, cat 3 = categories defined in the OECD guide-line

End-point - complete using one of the following glossary codes

Contents
emergence
growth
other (give an explanation),

Exposure period - If values for NOEC, LC0, LC50, LC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multi-entry programme.

a) **value** - fill in the numerical value of the exposure period

b) **Unit** - complete using one of the following glossary codes

Contents
day(s)
month

Unit of measurement for **NOEC**, **EC50**, **LC50** or other - complete using one of the following glossary codes

Contents
µg/l
µmol/l
g/l
mg/kg soil dry weight
mg/l
mmol/l
mol/l

NOEC, EC50, LC50 and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of NOEC, EC50, LC50... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. LC100, EC90 and so on

Method - complete using one of the following glossary codes

Contents
OECD Guide-line 208
other (give an explanation),

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.6.3 Toxicity to other Non-Mammalian Terrestrial Species (including Avians)

Species - complete using one of the following glossary codes

Contents	
Alectoris rufa	(redlegged partridge)
Anas platyrhynchos	(mallard duck)
Colinus virginianus	(bobwhite quail)
Colmba livia	(pigeon)
Coturnix coturnix japonica	(Japanese quail)
Culex pipiens quinquefasciatus	
Dosophila melanogaster	
Musca domesttica	
other	
other avian,	
other non soil dwelling arthropod,	
other terrestrial mollusc,	
Phasianus colchicus	(ring necked pheasant)
Musca sp.	

End-point - complete using one of the following glossary codes

Contents
mortality
other (give an explanation),
reproduction rate
weight

Exposure period - If values for NOEC, LC0, LC50, LC100 etc. are available for various times during the course of the test in addition to the values for the longest "exposure period", describe them by using the multi-entry programme.

a) **value** - fill in the numerical value of the exposure period

b) **Unit** - complete using one of the following glossary codes

Contents
day(s)
hour(s)
minute(s)
month
year(s)

Unit of measurement for **NOEC**, **LC0**, **LC50** and so on - complete using one of the following glossary codes

Contents
mg/kg body weight
other
ppm

NOEC, LC0, LC50, LC100 and other

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of NOEC, LC0, LC50... or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **other measurement of end-point** - fill in the measurement of end-point used e.g. LC90 and so on

Method - complete using one of the following glossary codes

Contents
OECD Guide-line 205
OECD Guide-line 206
other (give an explanation),

Year - fill in the year of publication or update of the Method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.7 Biological Effects Monitoring (including Biomagnification)

Remarks - Describe the results of the studies e.g. on variations in the predominant species in certain ecosystems, monitoring of biological effects and biomagnification (i.e. bioaccumulation through both food chains and the environment). In addition to information on organism, species (or ecosystem) studied, data on substance analysed (e.g. CAS number and name), analytical method, effects monitored (e.g. thinning of eggshell), monitoring conditions (e.g. water characteristics such as suspended matter, pH, temperature, hardness, soil/sediment characteristics such as content of organic carbon (%), clay content (%) should be described if available. If data is linked to information in item 3.2, please indicate the connection. Specify the monitoring site and the route of contamination of the site.
Each data should be described separately using the multi-entry programme.

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.8 Biotransformation and Kinetics in Environmental Species

Type: - complete using one of the following glossary codes

Contents
animal
aquatic
other
plant
terrestrial

Remarks - Describe the results of the studies on absorption, distribution, metabolism and excretion of the chemical in environmental species. In addition to information on species studied, data on substances including metabolites analysed (e.g. CAS number and name), analytical methods, organs studied,

mechanism of the transformation and metabolism, kinetic data on metabolism or absorption and excretion (e.g. half life), data on distribution among organs, effects of the chemicals if any should be described.
Data on concentrations of the parent chemical should be reported in item 3.2. If the data reported here is linked to information in 3.2, please indicate the connection.
Each data should be described separately using the muti-entry programme.

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

4.9 Additional Remarks

Remarks - give information on topics which can not be entered for the previous topics but belong to this chapter on Ecotoxicity

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5 Toxicity

5.1 Acute Toxicity

5.1.1 Acute Oral Toxicity

Type - complete using one of the following glossary codes:

Contents
LD0
LD100
LD50
LDLo
other (give an explanation),

Species - complete using one of the following glossary codes:

Contents	
Armenian hamster	miniature swine
cat	monkey
cattle	mouse
Chinese hamster	no data
dog	other
Drosophila melanogaster	pig
gerbil	primate
goat	quail
guinea pig	rabbit
hamster	rat
hen	rodent
human	sheep
laboratory animal	Syrian hamster
mammal	

Value - if a sex difference in the response is substantial (e.g. approaching an order of magnitude), enter the worst case information in the field and enter the information on sex difference in the remarks field

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of the test results or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **Unit** - complete using one of the following glossary codes:

Contents
mg/kg body weight (other units must be converted)

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, B.1
OECD Guide-line, 401
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, dose-response curve, other signs of toxicity, test validity, sex differences and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.1.2 Acute Inhalation Toxicity

Type - complete using one of the following glossary codes:

Contents
LC0
LC100
LC50
LCLo
other (give an explanation),

Species - complete using one of the following glossary codes:

Contents	
Armenian hamster	miniature swine
cat	monkey
cattle	mouse
Chinese hamster	no data
dog	other
Drosophila melanogaster	pig
gerbil	primate
goat	quail
guinea pig	rabbit
hamster	rat
hen	rodent
human	sheep
laboratory animal	Syrian hamster
mammal	

Exposure time

a) **Numerical value -** duration of exposure (e.g. 4)

b) **unit -** complete using one of the following glossary codes:

Contents
hour(s)
minute(s)
unspecified

Value - if a sex difference in the response is substantial (e.g. approaching an order of magnitude), enter the worst case information in the field and enter the information on sex difference in the remarks field.

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of the test results or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **Unit** - complete using one of the following glossary codes:

Contents
mg/l
ppm

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, B.2
OECD Guide-line, 403
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, dose response curve, other signs of toxicity, test validity sex differences and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.1.3 Acute Dermal Toxicity

Type - complete using one of the following glossary codes:

Contents
LD0
LD100
LD50
LDLo
other (give an explanation),

Species - complete using one of the following glossary codes:

Contents	
Armenian hamster	miniature swine
cat	monkey
cattle	mouse
Chinese hamster	no data
dog	other
Drosophila melanogaster	pig
gerbil	primate
goat	quail

guinea pig	rabbit
hamster	rat
hen	rodent
human	sheep
laboratory animal	Syrian hamster
mammal	

Value - if a sex difference in the response is substantial (e.g. approaching an order of magnitude), enter the worst case information in the field and enter the information on sex difference in the remarks field.

a) **Exactness**, if a range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of the test results or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **Unit** - complete using one of the following glossary codes:

Contents	
mg/kg	(body weight; other units must be converted)

Method - complete using one of the following glossary codes:

Contents
OECD Guide-line, 402
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on),

Remarks - give further information (e.g. on test method, on test results, dose response curve, other signs of toxicity, test validity sex differences and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.1.4 Acute Toxicity, Other Routes of Administration

Type - complete using one of the following glossary codes:

Contents
LC0
LC100
LC50
LCLo
LD0
LD100
LD50
LDLo
other (give an explanation),

Species - complete using one of the following glossary codes:

Contents	
Armenian hamster	miniature swine
cat	monkey
cattle	mouse
Chinese hamster	no data
dog	other
Drosophila melanogaster	pig
gerbil	primate
goat	quail
guinea pig	rabbit
hamster	rat
hen	rodent
human	sheep
laboratory animal	Syrian hamster
mammal	

Route of administration - complete using one of the following glossary codes:

Contents
i.m.
i.p.
i.v.
infusion
other (indicate route of administration),
s.c.

Exposure time, if appropriate

a) **Numerical value**

b) **unit -** complete using one of the following glossary codes:

Contents
hour(s)
minute(s)
unspecified

Value - if a sex difference in the response is substantial (e.g. approaching an order of magnitude), enter the worst case information in the field and enter the information on sex difference in the remarks field

a) **Exactness**, if the range rather than a specific value is entered, the field "a" should be left blank - complete using one of the following glossary codes:

Contents	
<	>
<=	>=
=	ca.

b) **value or lower value** - fill in the numerical value of the test results or lower limit of the range

c) **upper value** - fill in the upper limit of the range

d) **Unit** - complete using one of the following glossary codes:

Contents
mg/kg body weight
mg/l
other (give explanation),
ppm

Method, - describe the test-method (e.g. analogous to OECD Guide-line 401), use the remarks field for further explanation

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, dose response curve, other signs of toxicity, test validity sex differences and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.2 Corrosiveness and Irritation

5.2.1 Skin Irritation

Species - complete using one of the following glossary codes:

Contents
Armenian hamster
cat
cattle
Chinese hamster
dog
Drosophila melanogaster
gerbil
goat
guinea pig
hamster
hen
human
laboratory animal
mammal
miniature swine
monkey
mouse
no data
other
pig
primate
quail
rabbit
rat
rodent
sheep
Syrian hamster

Results - complete using one of the following glossary codes:

Contents
corrosive
highly corrosive
highly irritating
irritating
moderate irritating
not irritating
slightly irritating

Classification according Directive 67/548/EEC- complete using one of the following glossary codes, if possible:

Contents
corrosive (causes burns)
highly corrosive (causes severe burns)
irritating
not irritating

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, B.4
Draize-Test
Estimation
in-vitro test
OECD Guide-line, 404
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, dilution, test validity, occlusion, duration and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.2.2 Eye Irritation

Species - complete using one of the following glossary codes:

Contents
Armenian hamster
cat
cattle
Chinese hamster
dog
miniature swine
monkey
mouse
no data
other

Drosophila melanogaster
gerbil
goat
guinea pig
hamster
hen
human
laboratory animal
mammal
pig
primate
quail
rabbit
rat
rodent
sheep
Syrian hamster

Results - complete using one of the following glossary codes:

Contents
corrosive
highly corrosive
highly irritating
irritating
moderate irritating
not irritating
slightly irritating

Classification according Directive 67/548/EEC- complete using one of the following glossary codes, if possible:

Contents
irritating
not irritating
risk of serious damage to eyes

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, B.5
Draize-Test
OECD Guide-line, 405
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, route of administration (corneal or conjunctival sac etc.) , dilution, test validity, vehicle, occlusion duration, wash-out and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.3 Sensitization

Type - complete using one of the following glossary codes:

Contents
Buehler test,
Draize test,
Freund's complete adjuvant test,
Guinea pig maximation test,
Intracutaneus test,
Mauer optimisation test,
Mouse ear swelling test,
Mouse local lymphnode assay,
no data
Open epicutaneous test,
other
Patch test,
Skin painting test,
Split adjuvant test,

Species - complete using one of the following glossary codes:

Contents
Armenian hamster
cat
cattle
Chinese hamster
dog
Drosophila melanogaster
gerbil
goat
guinea pig
hamster
hen
human
laboratory animal
mammal
miniature swine
monkey
mouse
no data
other
pig
primate
quail
rabbit
rat
rodent
sheep
Syrian hamster

Result - complete using one of the following glossary codes:

Contents
ambiguous
not sensitizing
sensitizing

Classification according Directive 67/548/EEC- complete using one of the following glossary codes, if possible:

Contents
not sensitizing
sensitizing

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, B.6
OECD Guide-line, 406
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on)

Remarks - give further information (e.g. on test method, test results, test validity, occlusion, duration and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.4 Repeated Dose Toxicity

Species - complete using one of the following glossary codes:

Contents

Armenian hamster	miniature swine
cat	monkey
cattle	mouse
Chinese hamster	no data
dog	other
Drosophila melanogaster	pig
gerbil	primate
goat	quail

guinea pig	rabbit
hamster	rat
hen	rodent
human	sheep
laboratory animal	Syrian hamster
mammal	

Strain - complete using one of the following glossary codes:

Contents	
Abyssinian	Macaca Fascicularis
Angora	Marmoset
B6C3F1	Mulatta Arctoides
Balb/c	New Zealand Black
Beagle	New Zealand Red
Belgian Hare	New Zealand White
C3H	NMRI
C57BL	no data
Californian	Osborne-Mendel
CBA	other
CD-1	Pervuvian
Chinchilla	Pribright-Hartley
DBA	Polish
Dunkin-Hartley	San Juan
Dutch	Sencar
Fischer 344	Sherman
Fischer 344/DuCrj	Shorthair
Flemish Giant	SKH/HR1
Hartley	SIV 50
Himalayan	Sprague-Dawley
ICL-ICR	Strain A
ICR	Swiss
Leghorn	Swiss Webster
Long-Evans	Wistar

Sex - complete using one of the following glossary codes:

Contents	
female	male
male/female	no data

Route of administration - complete using one of the following glossary codes:

Contents
dermal
drinking water
gavage
infusion
inhalation
oral feed
oral
other (indicate the route of administration if different from the above or if an in utero exposure phase was included in the study),
unspecified
i.m.
i.p.
i.v.
s.c.

Exposure period - give the duration of treatment (e.g. 28 days, 90 days and so on)

Frequency of treatment - give the frequency of treatment (e.g. for inhalation studies: 6 hours per day/7 days per week and so on)

Postexposure observation period - give the duration of the postexposure observation period, if any (e.g. 14 days and so on)

Doses - give the dose levels of all treated animal groups followed by the number of animals per group

Control group - complete using one of the following glossary codes:

Contents
no
no data specified
other (give an explanation, particularly multiple control groups need to be reported),
yes, concurrent no treatment
yes, concurrent vehicle
yes, historical

NOEL, LOEL - give the no observed effect level of exposure (NOEL) and the lowest exposure level which produced adverse effects (LOEL) if this information is available from test results.

a) numeric value - value of NOEL and LOEL

b) Unit - complete using one of the following glossary codes:

Contents
%
mg/kg
mg/kg body weight/d
mg/l - only for inhalation studies
ppm - only for inhalation studies

Results - report all adverse effects seen in treated test animals compared to controls (Clinical signs and mortality, haematology, clinical chemistry and urinanalysis, post-mortem examinations including site, effects and dose should be reported). In order to facilitate the use and "searchability" of this free text field, please use capitals to indicate effects and their sites (e.g. VACUOLATION of LIVER). Give the number of affected animals per group (e.g. 4/5 showed INCREASED PROTEINURIA). If no signs of toxicity were seen, this should also be reported. Adverse effects should be reported related to dose levels, sex and duration of exposure and as a deviation from controls. Recovery, if any, should also be reported.

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, B. 7
Directive 84/449/EEC, B. 8
Directive 84/449/EEC, B. 9
Directive 87/302/EEC Part B, p 12
Directive 87/302/EEC Part B, p 16
Directive 87/302/EEC Part B, p 20
Directive 87/302/EEC Part B, p 27
Directive 87/302/EEC Part B, p 8
OECD Guide-line, 407
OECD Guide-line, 408
OECD Guide-line, 409
OECD Guide-line, 410
OECD Guide-line, 411
OECD Guide-line, 412
OECD Guide-line, 413
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on),

Remarks - give further information (e.g. on test method, test results, dose response curve, other signs of toxicity, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.5 Genetic Toxicity in Vitro

Type - complete using one of the following glossary codes:

Contents
Ames test
Bacillus subtilis recombination assay
Bacterial forward mutation assay
Bacterial gene mutation assay
Bacterial reverse mutation assay
Cytogenetic assay
DNA damage and repair assay
Escherichia coli reverse mutation assay
Gene mutation in Saccharomyces cervisiae
HGPRT assay
Mammalian cell gene mutation assay
Mitotic recombination in Saccharomyces cervisiae
Mouse lymphoma assay
other (give an explanation)
Salmonella typhimurium reverse mutation assay,(modified Ames test)
Sister chromatid exchange assay
Unscheduled DNA synthesis
Yeast cytogenetic assay
Yeast gene mutation assay

System of testing - specify the test system used in the described type of test(e.g. for bacterial gene mutation studies in vitro give full identification of bacteria and strains used, for cytogenetic assay give the cell-lines or cell types).

Concentration - enter the numerical value and their units

Metabolic activation - complete using one of the following glossary codes:

Contents
no data
with
with and without
without

Results - complete using one of the following glossary codes:

Contents
ambiguous
negative
positive

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, B. 10
Directive 84/449/EEC, B. 13
Directive 84/449/EEC, B. 14
Directive 87/302/EEC Part B, p 55
Directive 87/302/EEC Part B, p 58
Directive 87/302/EEC Part B, p 61
Directive 87/302/EEC Part B, p 64
Directive 87/302/EEC Part B, p 68
Directive 87/302/EEC Part B, p 73
OECD Guide-line, 471
OECD Guide-line, 472
OECD Guide-line, 473
OECD Guide-line, 476
OECD Guide-line, 479
OECD Guide-line, 480
OECD Guide-line, 481
OECD Guide-line, 482
other (give an explanation,

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on),

Remarks - give further information (e.g. on test method, metabolic activation, test results, cytotoxic effects, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.6 Genetic Toxicity in Vivo

Type - complete using one of the following glossary codes:

Contents
Cytogenetic assay,
Dominant lethal assay,
Drosophila SLRL test,
Heritable translocation assay,
Inhibition of DNA-Synthesis
Mammalian germ cell cytogenetic assay,
Micronucleus assay,
Mouse spot test,
other (give an explanation)
Sister chromatid exchange assay,
Somatic mutation assay,
Unscheduled DNA synthesis,
unspecified

Species - complete using one of the following glossary codes:

Contents
Armenian hamster
cat
cattle
Chinese hamster
dog
Drosophila melanogaster
gerbil
goat
guinea pig
hamster
hen
human
laboratory animal
mammal
miniature swine
monkey
mouse
no data
other
pig
primate
quail
rabbit
rat
rodent
sheep
Syrian hamster

Strain - complete using one of the following glossary codes:

Contents
Abyssinian
Angora
B6C3F1
Balb/c
Beagle
Belgian Hare
C3H
C57BL
Californian
CBA
CD-1
Chinchilla
Macaca Fascicularis
Marmoset
Mulatta Arctoides
New Zealand Black
New Zealand Red
New Zealand White
NMRI
no data
Osborne-Mendel
other
Pervuvian
Pribright-Hartley

DBA	Polish
Dunkin-Hartley	San Juan
Dutch	Sencar
Fischer 344	Sherman
Fischer 344/DuCrj	Shorthair
Flemish Giant	SKH/HR1
Hartley	SIV 50
Himalayan	Sprague-Dawley
ICL-ICR	Strain A
ICR	Swiss
Leghorn	Swiss Webster
Long-Evans	Wistar

Sex - complete using one of the following glossary codes:

Contents	
female	male/female
male	no data

Route of administration - complete using one of the following glossary codes:

Contents
dermal
drinking water
gavage
i.m.
i.p.
i.v.
infusion
inhalation
oral feed
oral unspecified
other (indicate route of administration),
s.c.

Exposure period - give the duration of treatment.

Doses - give the dose levels of all test groups including controls

Results - state, if possible, whether overall result is positive or negative. Give information on whether or not the test substance produced statistically-significant, dose-related mutagenic effects. Report experimental observations including signs of toxicity, time of sacrifice (e.g. for the rodent dominant lethal test).

Method - complete using one of the following glossary codes:

Contents
Directive 84/449/EEC, B. 11
Directive 84/449/EEC, B. 12
Directive 87/302/EEC Part B, p 71

Directive 87/302/EEC Part B, p 76
Directive 87/302/EEC Part B, p 79
Directive 87/302/EEC Part B, p 82
Directive 87/302/EEC Part B, p 85
OECD Guide-line, 474
OECD Guide-line, 475
OECD Guide-line, 477
OECD Guide-line, 478
OECD Guide-line, 483
OECD Guide-line, 484
OECD Guide-line, 485
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on),

Remarks - give further information (e.g. on test method, test results, test validity, sex difference)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.7 Carcinogenicity

Species - complete using one of the following glossary codes:

Contents
Armenian hamster
cat
cattle
Chinese hamster
dog
Drosophila melanogaster
gerbil
goat
guinea pig
hamster
hen
miniature swine
monkey
mouse
no data
other
pig
primate
quail
rabbit
rat
rodent

human	sheep
laboratory animal	Syrian hamster
mammal	

Strain - complete using one of the following glossary codes:

Contents	
Abyssinian	Macaca Fascicularis
Angora	Marmoset
B6C3F1	Mulatta Arctoides
Balb/c	New Zealand Black
Beagle	New Zealand Red
Belgian Hare	New Zealand White
C3H	NMRI
C57BL	no data
Californian	Osborne-Mendel
CBA	other
CD-1	Pervuvian
Chinchilla	Pribright-Hartley
DBA	Polish
Dunkin-Hartley	San Juan
Dutch	Sencar
Fischer 344	Sherman
Fischer 344/DuCrj	Shorthair
Flemish Giant	SKH/HR1
Hartley	SIV 50
Himalayan	Sprague-Dawley
ICL-ICR	Strain A
ICR	Swiss
Leghorn	Swiss Webster
Long-Evans	Wistar

Sex - complete using one of the following glossary codes:

Contents	
male	male/female
female	no data

Route of administration - complete using one of the following glossary codes:

Contents
dermal
drinking water
gavage
implantation
infusion
inhalation
oral feed
oral
other (indicate the route of administration if different from the above or if an in utero exposure phase was included in the study),
unspecified
i.m.
i.p.
i.v.
s.c.

Exposure period - give the duration of treatment (e.g. 2 years and so on)

Frequency of treatment - give the frequency of treatment (e.g. for inhalation studies: 6 hours per day/7 days per week and so on)

Postexposure observation period - give the duration of the postexposure observation period, if any

Doses - give the dose levels and number of animals for all test groups

Control group - complete using one of the following glossary codes:

Contents
no
no data specified
other (give an explanation, particularly multiple control groups need to be reported),
yes, concurrent no treatment
yes, concurrent vehicle
yes, historical

Results - give a summary of the test results. Included should be clinical data, haematology and post-mortem examinations. Data or observations in comparison to control data which may be indicative of toxic effects including hyperplasia, pre-neoplasia or neoplasia should be reported. Of particular importance is the effect observed / site of the effect / the dose(s) for which it was observed / and the frequency of its occurrence in all treatment and control groups (e.g. number of animals effected out of number of animals in the same group). In order to facilitate the use and "searchability" of this free text field, please use capitals to indicate effects and their sites (e.g. CARCINOMA in the KIDNEY). The exact tumour type can be recorded in the remarks field. If no substance related effects were observed, indicate NO EFFECT. For ambiguous results, record INCONCLUSIVE. As appropriate, indicate other data of significance (e.g. BODY WEIGHT LOSS and INCREASED WHITE BLOOD CELLS).

Method - complete using one of the following glossary codes:

Contents
Directive 87/302/EEC Part B, p 32
Directive 87/302/EEC Part B, p 37
OECD Guide-line, 451
OECD Guide-line, 453
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on),

Remarks - give further information (e.g. on test method, test results, survival time of the animals, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.8 Toxicity to Reproduction

Type - complete using one of the following glossary codes:

Contents
Fertility
One generation study
other (give an explanation)
Two generation study

Species - complete using one of the following glossary codes:

Contents
Armenian hamster
cat
cattle
Chinese hamster
dog
Drosophila melanogaster
gerbil
goat
guinea pig
hamster
hen
human
laboratory animal
mammal
miniature swine
monkey
mouse
no data
other
pig
primate
quail
rabbit
rat
rodent
sheep
Syrian hamster

Strain - complete using one of the following glossary codes:

Contents	
Abyssinian	Macaca Fascicularis
Angora	Marmoset
B6C3F1	Mulatta Arctoides
Balb/c	New Zealand Black
Beagle	New Zealand Red
Belgian Hare	New Zealand White
C3H	NMRI
C57BL	no data
Californian	Osborne-Mendel
CBA	other
CD-1	Pervuvian
Chinchilla	Pribright-Hartley
DBA	Polish
Dunkin-Hartley	San Juan
Dutch	Sencar
Fischer 344	Sherman
Fischer 344/DuCrj	Shorthair
Flemish Giant	SKH/HR1
Hartley	SIV 50
Himalayan	Sprague-Dawley
ICL-ICR	Strain A
ICR	Swiss
Leghorn	Swiss Webster
Long-Evans	Wistar

Sex - complete using one of the following glossary codes:

Contents	
male	male/female
female	no data

Route of administration - complete using one of the following glossary codes:

Contents

dermal
dermal
drinking water
gavage
infusion
inhalation
oral feed
oral
other (indicate the route of administration if different from the above or if an in utero exposure phase was included in the study),
unspecified
i.m.
i.p.
i.v.
s.c.

Exposure period - give the gestation days the dams were exposed to the test compound (e.g. days 6-15 where day 0 is the day on which a vaginal plug and/or sperm are observed)

Frequency of treatment - give the frequency of treatment (e.g. for inhalation studies: 6 hours per day/7 days per week and so on)

Premating exposure period: give the duration of the dosing period prior to the mating period for males and females and if possible the age of the animals at the start of dosing (e.g. ten weeks for male rats (6 weeks old)).

Duration of the test - give the total duration of the test including the premating exposure period.

Doses - give the dose levels of all treated animal groups and the number of animals in all treated groups.

Control group - complete using one of the following glossary codes:

Contents
no
no data specified
other (give an explanation, particularly multiple control groups need to be reported),
yes, concurrent no treatment
yes, concurrent vehicle
yes, historical

NOEL Parental - give, if possible, the no observed effect level of exposure for parental males and females.

NOEL F1 Offspring - give, if possible, the no observed effect level of exposure for F1-generation animals.

NOEL F2 Offspring - give, if possible, the no observed effect level of exposure for F2 generation animals.

a) **Exactness** - fill in the code of the following glossary

Contents	
<	>
<=	>=
=	ca.

b) **numeric value -** value of NOEL

c) **Unit -** complete using one of the following glossary codes:

Contents	
%	mg/l/day
g/kg body weight/d	ppm/day

Results -Give a summary of test results. Included should be clinical data (e.g. body weight, food consumption, clinical examination, examination of litters (including size)) and post-mortem examination (e.g. gross pathology, histopathology). Report the relationship between the dose of the test substance and the presence or absence, the incidence and severity of abnormalities, body weight changes, EFFECTS on mortality, fertility index (pregnancies/mating), abortions, corpora lutea, pup weights with age, other survival indices (e.g. live birth index) and other toxic effects. In order to facilitate the use an "searchability" of this free text field, please use capitals to indicate effects and their sites.

Method - complete using one of the following glossary codes:

Contents
Directive 87/302/EEC Part B, p 43
Directive 87/302/EEC Part B, p 47
OECD combined repeated dose and reproductive/developmental toxicity screening test
OECD Guide-line, 415
OECD Guide-line, 416
OECD preliminary reproduction toxicity screening test
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on),

Remark - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.9 Developmental Toxicity/Teratogenicity

Species - complete using one of the following glossary codes:

Contents	
Armenian hamster	miniature swine
cat	monkey
cattle	mouse
Chinese hamster	no data
dog	other
Drosophila melanogaster	pig
gerbil	primate
goat	quail
guinea pig	rabbit
hamster	rat
hen	rodent
human	sheep
laboratory animal	Syrian hamster
mammal	

Strain - complete using one of the following glossary codes:

Contents	
Abyssinian	Macaca Fascicularis
Angora	Marmoset
B6C3F1	Mulatta Arctoides
Balb/c	New Zealand Black
Beagle	New Zealand Red
Belgian Hare	New Zealand White
C3H	NMRI
C57BL	no data
Californian	Osborne-Mendel
CBA	other
CD-1	Pervuvian
Chinchilla	Pribright-Hartley
DBA	Polish
Dunkin-Hartley	San Juan
Dutch	Sencar
Fischer 344	Sherman
Fischer 344/DuCrj	Shorthair
Flemish Giant	SKH/HR1
Hartley	SIV 50
Himalayan	Sprague-Dawley
ICL-ICR	Strain A
ICR	Swiss
Leghorn	Swiss Webster
Long-Evans	Wistar

Sex - complete using one of the following glossary codes:

Contents	
male	male/female
female	no data

Route of administration - complete using one of the following glossary codes:

Contents
dermal
drinking water
gavage
infusion
inhalation
oral feed
oral
other (indicate the route of administration if different from the above or if an in utero exposure phase was included in the study),
unspecified
i.m.
i.p.
i.v.
s.c.

Duration of the test - Give the day of gestation (with day 0 being defined as the day on which a vaginal plug and/or sperm were observed) on which the dams were sacrified or for certain developmental studies, the age of the pups when killed.

Exposure period - give the gestation days the dams were exposed to the test compound (e.g. days 6-15 where day 0 is the day on which a vaginal plug and/or sperm are observed)

Frequency of treatment - give the frequency of treatment (e.g. for inhalation studies: 6 hours per day/7 days per week and so on)

Doses - give the dose levels of all treated animal groups and the number of animals per group (as appropriate indicate any treatment of male animals).

Control group - complete using one of the following glossary codes:

Contents
no
no data specified
other (give an explanation, particularly multiple control groups need to be reported),
yes, concurrent no treatment
yes, concurrent vehicle
yes, historical

NOEL Maternal Toxicity - give, if possible, the no observed effect level of exposure for maternal animals.

NOEL Teratogenicity - give, if possible, the no observed effect level of exposure for teratogenic effects.

a) **Exactness** - fill in the code of the following glossary

Contents	
<	>
<=	>=
=	ca.

b) **numeric value -** value of NOEL

c) **Unit -** complete using one of the following glossary codes:

Contents	
%	mg/l/day
mg/kg body weight/d	ppm/day

Results - give a summary of test results. Included should be clinical data (e.g. body weight, food consumption, clinical signs and mortality) and post-mortem examinations of reproductive organs (e.g. gross pathology, number of corpora lutea, embryonic or fetal death, morphological examination of fetuses). Give information about fetal data (e.g. live/dead, soft tissue and skeletal defects). Indicate the type of abnormalities observed (e.g. cleft palate, fused ribs, hydrocephalus etc.).In order to facilitate the use an "searchability" of this free text field, please use capitals to indicate effects and their sites.

Method - complete using one of the following glossary codes:

Contents
Chernoff-Kavlock Teratogenicity screening test
Directive 87/302/EEC Part B, p 24
OECD Guide-line, 414
other (give an explanation),

Year - fill in the year of publication or update of method used

GLP - complete using one of the following glossary codes:

Contents
no
no data
yes

Test substance - complete using one of the following glossary codes:

Contents
as prescribed by 1.1 - 1.4
no data
other TS (give an explanation: e.g. purity , impurities, solvent, vehicle, formulation and so on),

Remarks - give further information (e.g. on test method, test results, test validity and so on)

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.10 Other Relevant Information (e.g. Toxicokinetics, Immunotoxicity, Neurotoxicity, Cytotoxicity etc.)

Type - complete using one of the following glossary codes:

Contents
Absorption
Behaviour
Biochemical or cellular interactions
Chemobiokinetics general studies
Cytotoxicity
Distribution
Excretion
Immunotoxicity
Metabolism
Neurotoxicity
other (give an explanation),
Toxicokinetics

Remarks - Provide information on other toxic hazards produced by exposure to the substance in animals and man or features related to toxicity. Give short description of study design and observed effects.

Reference - fill in the reference in the free text field (RE). If more than one reference is available list the primary source first.

5.11 Experience with Human Exposure

Give full Description of Study Design, Effects of Accidental or Occupational Exposure, Epidemiology. Each data filled in should be mentioned separately by using the multi-entry programme.

Remarks - include also information on concentration of the chemicals in the workplace or indoor environments

Reference - fill in the reference in the free text field (RE).