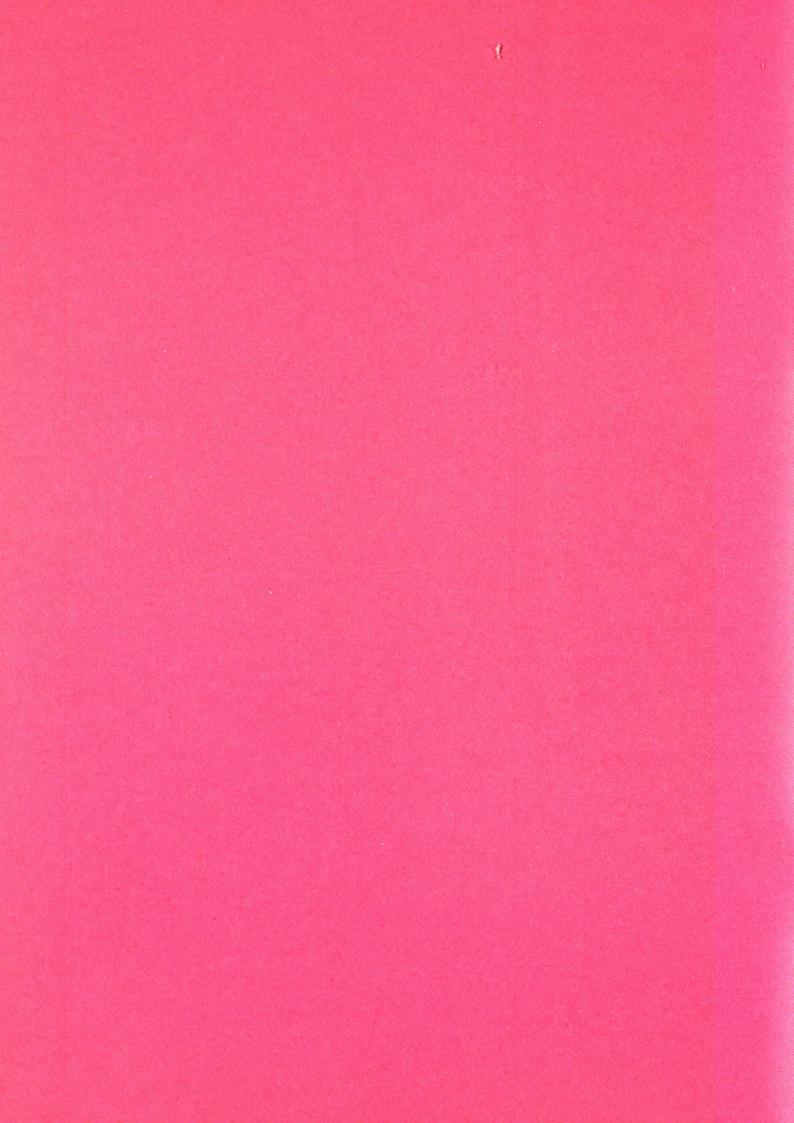
COMMISSION OF THE EUROPEAN COMMUNITIES

REPORTS
OF THE SCIENTIFIC COMMITTEE
FOR FOOD

Sixth series



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SECOND REPORT OF THE SCIENTIFIC COMMITTEE FOR FOOD ON THIABENDAZOLE

(Opinion expressed 23 June 1978)

TERMS OF REFERENCE

To complete the evaluation which was begun in January 1976 on

- the acceptability from the point of view of health and hygiene, of the use of thiabendazole for the protection of citrus fruit against moulds,
- the possibility of raising the maximum residue of thiabendazole in citrus fruit to 10 mg/kg of whole fruit as requested by the users, instead of 6 mg/kg now accepted on a provisional basis by the Community Directive on Preservatives authorized for use in foodstuffs intended for human consumption.

REVIEW OF 1976

In its first Report on Thiabendazole (2 April 1976) the Committee was unable to give a definitive opinion on the continued use of thiabendazole on citrus fruit. Although it was known by the Committee that thiabendazole was also used as a pesticide on other agricultural products, and in veterinary medicine, the committee had insufficient information on these uses.

The Committee concluded that for it to advise on the use of thiabendazole on citrus fruit, it would need to have some indication on the total human intake from all sources, including the intake resulting from the use of thiabendazole as a pesticide and in veterinary medicine.

Nevertheless the Committee had believed that on the basis of the extensive toxicological data it had before it, there was no reason to object to the extension to 31 December 1978 of the existing provisions for thiabendazole on citrus fruit (and bananas) which were included in the Community Directive on Preservatives.

The Committee's advice was followed and the Directive requires that a further decision should be taken before 31 December 1978².

CURRENT REVIEW

The present review has been concerned primarily with examining the data which have been received by the Commission since the publication of the first Report, so as to evaluate whether these would enable the Committee to give an opinion on the definitive inclusion of thiabendazole in the Directive.

TOXICOLOGICAL EVALUATION

The extensive toxicological data available have been provided in the main by the manufacturers of thiabendazole. Very satisfactory summaries of these data are contained in the monographs and reports of the conclusions of the FAO/WHO joint meeting on Pesticide Residues in Food, in particular in 19703. On the basis of these data, further tissue residue and excreta studies in animals, and safety studies in humans (not yet published), which have been made known to the Committee since its evaluation in 1976, the Committee has been able to estimate an Acceptable Daily Intake (ADI) for man at 0-0.3 mg/kg b.w.

The Committee is informed that the FAO/WHO joint meeting on Pesticide Residues in Food has also been provided with this information and has come to a similar conclusion.

USES OF THIABENDAZOLE

(a) Agriculture

The Committee was provided with summaries of the use of thiabendazole as an agricultural

funcicide in Europe and elsewhere. It was informed that there are some 40 or more registered uses of thiabendazole in pre-plant (seed treatment) and pre-harvest treatment as well as for use in post-harvest treatment. Not all uses are registered in all countries, and many applications are limited to the control of only a few diseases on each crop. Thiabendazole, therefore, is often formulated together with other fungicides to increase the range of diseases controlled. Residue data were also provided.

It was also apparent from the information that thiabendazole may be used pre-harvest and post-harvest on the same crop (e.g. in apples, pears, bananas, citrus, grapes, sugarbeet and tomatoes).

The legislative complications caused by this dual usage are at present being reviewed by the Commission Services, but for the purposes of its evaluation the Committee was interested in intake and not its legislative classification.

Analyses of citrus fruit carried out in Member States and evidence from shipping trials indicate that there is no technological justifications for raising the currently permitted maximum residue of 6 mg/kg whole fruit (a figure derived by analysis of a suitably representative sample of a lot).

(b) Medicine

Thiabendazole possesses anthelmintic properties and is used for this purpose in https://human.and.animal medicine.

The Committee has stressed on several occasions that it is not desirable to use in agriculture, products which have a use in human medicine and which may be used in veterinary medicine. However, on the basis that in the case of this particular substance:

- the use in human medicine is limited (in Europe);
- residues from veterinary practice are low (of the order of 0.1 mg/kg b.w.);
- a residue limit of 6 mg/kg calculated on a whole fruit basis continues to be sufficient.

the Committee is of the opinion that this is not in itself sufficient grounds for the prohibition of use of thiabendazole on citrus fruit.

ASSESSMENT OF TOTAL HUMAN INTAKE

The Committee was unable to assess total human intake with any great accuracy from the information presented to it.

Nevertheless, given

- i) the significant increase in ADI which the new toxicological data has permitted
- ii) the information on residue limits submitted during the review

there is no reason to think that the ADI will be exceeded over a period of time. Should more precise information become available showing the contrary, the Committee would wish to be informed and consulted.

CONCLUSIONS

- After considering all the relevant toxicological data the Committee established an ADI of O.3 mg/kg bodyweight for thiabendazole.
- 2. In the absence of convincing evidence of technological justification for an increase in the levels already stipulated in the Directive on the use of preservatives in food the Committee recommends that the provisions in the Directive on thiabendazole be maintained and that the permitted residue levels for citrus fruits and bananas should not be raised.

3. The situation should be reviewed if more precise evidence on total human intake of thiabendazole from all sources shows that the ADI is likely to be exceeded. Under these circumstances the Committee would wish to be consulted.

REFERENCES

- 1. Reports of the Scientific Committee for Food (2nd Series)
- 2. Council Directive 76/629/EEC of 20 July 1976 0.J. L 223 of 16.8.1976, p. 3.
- 3. FAO/WHO, 1971, "1970 Evaluations of some pesticide residues in food", WHO/Food Add/71.42.

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REPORT OF THE SCIENTIFIC COMMITTEE FOR FOOD ON THE POSITIVE

LIST OF SUBSTANCES TO BE AUTHORIZED IN THE MANUFACTURE

OF REGENERATED CELLULOSE FILMS INTENDED TO COME INTO

CONTACT WITH FOODSTUFFS

(Opinion expressed 28 September 1978)

TERMS OF REFERENCE

To advise on the toxicological acceptability of substances proposed for use in the manufacture of regenerated cellulose films intended to come into contact with foodstuffs. Advice was also requested on whether the suggested technological restrictions are sufficient to ensure the health of the public.

BACKGROUND

- 1. The outline Directive on Materials and Articles intended to come into contact with Foodstuffs (76/893/EEC)(1) provides in Article 3 that
 - the Council shall adopt by means of Directives special provisions applicable to certain groups of materials and articles (specific Directives)
 - such specific Directives may include among other provisions a list of the substances the use of which is authorized to the exclusions of all others (positive list).
- 2. Regenerated cellulose films have been selected as one of these groups of materials and articles to be regulated by a specific Directive because
 - a number of substances used in the manufacture of these films, if they migrate into packaged food, might constitute a danger to human health
 - in certain Member States of the Community legislation or recommendations exist, which differ from each other and thus constitute a technical barrier to intercommunity trade of these packaging materials or of the foodstuffs packaged in these materials.
- 3. For these reasons the Commission has decided to elaborate a draft proposal for a Directive on regenerated cellulose films intended to come into contact with food (2). In this project it is proposed to establish a positive list of substances to be authorized in the manufacture of these packaging materials. The Commission has requested the advice of the Committee on the toxicological acceptability of these substances.
- 4. In elaborating its advice the Committee has followed the guidelines laid down in the document "Toxicological evaluation of a substance for materials and articles intended to come into contact with foodstuffs"(3).

CURRENT REVIEW

1. The Committee was informed that, contrary to the principle of providing total and specific migration limits for substances appearing in positive lists for other types of materials and articles, in the case of regenerated cellulose films, limits of composition would be indicated eventually in the draft proposal of Directive for individual substances or groups of substances. The reasons for departing from the usual practice were the inherent difficulties in devising appropriate methodology for establishing migration data for films of regenerated cellulose and the technologically conditioned restrictions in the use of these films to the packaging of certain types of food only. The Committee was aware that the proposed list of substances had been screened already for unnecessary items by the Commission with the help of a Working group of Experts. Data sheets on the nature, technical usage and toxicity of each substance or group of substances were prepared by the Committee served as a basis for the assessment.

- 2. In developing its approach to the task the Committee accepted, that the physical and physicochemical properties of regenerated cellulose films made inappropriate the use of conventional migration tests, which employed food simulants. On arriving at its advice on toxicological acceptability of a substance the Committee took into consideration the magnitude of the compositional restrictions stipulated in the draft proposal of the Commission.
- 3. Where possible for the purposes of this Report the Committee endorsed the ADIs (*) established by JECFA (**) without necessarily reviewing the data base for the JECFA decision because of the low level of intake likely to arise from the migration of substances into the packaged food. In other cases the Committee used the ADIs it had established as part of the reviews carried out previously and published in its reports. In other cases the Committee established a tolerable daily intake (TDI) for each substance or groups of substances listed, where the data sufficed for this purpose. In selecting this approach the Committee considered that many of the substances which could migrate potentially from regenerated cellulose films might also migrate from other packaging materials, when present therein, into the same or other foods, or might be ingested from other sources. In establishing these TDIs a particularly cautious approach was chosen involving either the choice of a larger safety factor than usual, or the consideration of a very low concentration being present in the regenerated cellulose film. The Committee emphasizes, however, that the procedure adopted for establishing TDIs for these packaging migrants is not applicable to food additives where the well known classical procedures for establishing ADIs are used.
- 4. The formal ADI (established by JECFA or this Committee) relates to the total intake from all sources including food additives and food packaging materials. The Committee was of the opinion that the intake from packaging materials would not significantly add to the total dietary load, providing the lowest technological level was used.
- 5. The TDIs need not be restricted in their applicability to substances used in regenerated cellulose films. The TDIs are valid equally if these substances are used as components of any other food packaging material. If individual TDIs have been set for closely related substances these must be reduced proportionately when mixtures of these substances are used.
- 6. The Committee noted that as with other food packaging materials, consideration should be given to the need for avoiding excessive transfer to the packaged food of those substances of the regenerated cellulose films which could be shown to migrate. It will therefore be necessary to recommend the use of the lowest level in the composition of the film consistent with technological need. This may avoid a situation in which most of the TDI was taken up by a substance approved for use in regenerated cellulose films and thus blocking its use in other packaging materials where it might also be required technologically.
- 7. Where no or only scanty data were available no toxicological evaluation was made by the Committee. If supporting toxicological information on the packaging material itself or from close analogues existed and the substance was only used in regenerated cellulose films for food packaging the Committee had no objection to this specific usage.

The TDIs are valid equally if these substances are used in the manufacture of any other type of material or article intended to come into contact with foodstuffs.

^(*) ADI=Acceptable Daily Intake

^(**) JECFA=Joint FAO/WHO Expert Committee on Food Additives

- 8. During its consideration of the available toxicological information the Committee noted that practically no relevant information existed in many instances on the effects of individual substances on reproduction, or on teratogenicity and mutagenicity potential. These aspects could therefore not be considered in most of the evaluations. Should further information become available, reconsideration of the present assessments would become necessary.
- 9. At this stage of the review the Committee did not state any requirements regarding additional toxicological information as the type of information needed for assessment has already been set out elsewhere by the Committee (3).
- 10. The Committee noted that many polymers and copolymers were listed as additives to regenerated cellulose films which have been coated with polymers on one or both sides of the film. Since these polymers are used in other packaging materials, the Committee is of the opinion that polymers and copolymers should be discussed as a separate issue, and not specifically in relation to cellulose films only. It was also thought advisable to consider the problem of monomers separately and to establish limits for monomers and other constituents in relation to each polymer independently of the packaging material in which it was used. This would help in achieving uniformity of assessment.
- 11. On the basis of the above considerations the Committee evaluated all items proposed for use in regenerated cellulose films. The Committee was of the opinion that the proposed classification best answered the questions on which its advice had been requested.
- 12. The Committee drew attention to the need for ensuring that regenerated cellulose films correspond to a general food grade specification. The Committee recommended the development of procedures to permit examination of regenerated cellulose films with respect to compliance with the conclusions of this report.

CONCLUSIONS

Substances for which an ADI has been established by JECFA or this Committee and which are therefore toxicologically acceptable for use in the manufacture of regenerated cellulose films

: not specified (4) Glycerol 1.2 Propanediol _ 1.2 Propylenediol _ 7 : ADI : 25 mg/kg b.w. (5) : not specified (5) Sorbitol Acetic acid and its NH, Ca, Mg, K and Na salts : not specified (5) ascorbic acid and its NH_4 , Ca, Mg, K and Na salts : ADI : 15 mg/kg b.w. (5) : ADI : 5 mg/kg b.w. (5) Benzoic acid and sodium benzoate : ADI : 3 mg/kg b.w. (5) Formic acid and its NH₁, Ca, Mg, K and Na salts : not specified (5) Citric acid and Na, K salts : ADI : 30 mg/kg b.w. (6) 1-Tartaric acid and Na, K salts : not specified (5) d, 1-Lactic acid and Na, K salts : ADI : 25 mg/kg b.w. (5) Sorbic acid and its NH, Ca, Mg, K and Na salts : not specified (5) Amylose : not specified (7) Calcium and magnesium carbonate

: not specified (5) Calcium chloride Esters of glycerol with linear fatty acids, saturated or unsaturated, with an even number of carbon atoms from 8 to 20 inclusive and/or with : ADI : 25 mg/kg b.w. (5) citric acid Esters of glycerol with linear fatty acids, saturated or unsaturated, with an even number of carbon atoms from 8 to 20 inclusive and/or : ADI : 5 mg/kg b.w. (6) adipic acid Esters of glycerol with linear fatty acids, saturated or unsaturated, with an even number of carbon atoms from 8 to 20 inclusive and/or 12 hydroxystearic acid / Oxystearin / : ADI : 25 mg/kg b.w. (5) Esters of polyoxyethylene (8-14 oxyethylene groups) with linear fatty acids, saturated or unsaturated, with an even number of carbon atoms from 8 to 20 inclusive : ADI : 25 mg/kg b.w. (5) Esters of Sorbitol with linear fatty acids, saturated or unsaturated, with an even number of carbon atoms from 8 to 20 inclusive : ADI : 25 mg/kg b.w. (5) Oxides and hydroxides of Aluminium, Calcium, : not specified (8) Magnesium and Silicon Silicates and hydrated silicates of Aluminium. : not specified (5) Calcium, Magnesium Sodium propionate : not specified (5) : ADI : 25 mg/kg b.w. (5) Methyl and hydroxypropyl ethers of cellulose Castor oil and its products of dehydration or : ADI : 25 mg/kg b.w. as the sum of these substances (5) hydrogenation Castor oil and its condensation products with : ADI : 7.5 mg/kg b.w. (5) polyglycerol Castor oil and its condensation products with : ADI : 5 mg/kg b.w. (5) adipic acid Di-ethylhexyl adipate) ADI: 5 mg/kg b.w. as the sum of) these substances (6) Di-isobutyl and di.n.butyl adipate Glycerol triacetate / Triacetin 7 : not specified (9) : ADI : 1.5 mg/kg b.w. (10) Dimethylpolysiloxane

2- and 3- tert. butyl- 4 hydroxyanisol / Butylhydroxytoluene - BHT 7

2.6-di-tert. butyl-4 methyl phenol Butylhydroxytoluene - BHT /

Ethyl acetate

these substances (6)

ADI: 0.5 mg/kg b.w. as the sum of

2. Substances for which a TDI has been established by this Committee and which are therefore toxicologically acceptable for use in the manufacture of regenerated cellulose Bis (2 hydroxyethyl) ether [Diethyleneglycol] Ethanediol \int Monoethyleneglycol \int TDI: 0.5 mg/kg b.w. as the sum of these substances Mono and/or di esters of stearic acid with ethanediol and/or bis (2-hydroxyethyl) ether and/or triethylene glycol : TDI : 7.5 mg/kg b.w. 1.3 Butanediol Polyethylene_oxide Z=Polyethyleneglycol - PEG TDI: 5 mg/kg b.w. as the sum of 300 - 4000 7these substances Triethyleneglycol 1.2 Polypropylene oxide \(\int \)1.2 Polypropyleneglycol : TDI : 1.5 mg/kg b.w. Maleic acid, castor oil condensed with maleic acid : TDI : 0.5 mg/kg b.w. Sodium alkyl ($C_8 - C_{18}$) benzenesulphonate TDI: 0.1 mg/kg b.w. as the sum of Sodium isopropyl naphthalene sulphonate these substances Sodium alkyl ($C_8 - C_{18}$) sulphonate Sodium dodecyl $(C_{1,2})$ benzenesulphonate : TDI : l mg/kg b.w. Sodium alkyl ($C_8 - C_{18}$) sulphate) TDI: 2 mg/kg $b_{\bullet}w_{\bullet}$ as the sum of these substances Ammonium, magnesium, and potassium lauryl-sulphates N.N distearoyl diaminoethane /N,N $^{\circ}$ distearoyl ethylenediamine 7TDI: 25 mg/kg b.w. as the sum of N.N'-dipalmitoyl diaminoethane \sqrt{N} , N-dipalmitoyl ethylenediamine 7these substances N.N' dioleoyl diaminoethane $\sqrt{N,N'}$ —dioleoyl ethylenediamine_ \sqrt{N} : TDI : O.l mg/kg b.w. Sodium dioctylsulphosuccinate Condensed melamine-formaldehyde, modified or ummodified: Condensation product of melamineformaldehyde, TDI: 10 mg/kg b.w. as the sum of modified with one or more of the following products:) butanol, diethylenetriamine, ethanol, these substances triethylenetetramine, tetraethylenepentamine, tris (2-hydroxyethyl)amine, 3-3' diaminodipropylamine, 4-4' diaminodibutylamine Cross-linked cationic polyalkyleneamines: (a) polyamide-epichlorhydrin resin based on diaminopropylmethylamine and epichlorhydrin TDI: 0.5 mg/kg b.w. as the sum of these substances (b) polyamide-epichlorhydrin resin based on epichlorhydrin, adipic acid, caprolactam, diethylene triamine and/or ethylenediamine (c) polyamide-epichlorhydrin resin based on adipic acid, diethylenetriamine and epichlorhydrin, cr a mixture of epichlorhydrin and ammonia

	(d) polyamide-polyamine-epichlorhydrin resin based on epichlorhydrin, dimethyl adipate and diethylenetriamine	}	TDI: 0.5 mg/kg b.w. as the sum
	(e) polyamide-polyamine-epichlorhydrin resin based on epichlorhydrin; adipamide and diaminopropylmethylamine	}	of these substances
	Polyethyleneamines/polyethyleneimines	:	TDI : 0.2 mg/kg b.w. as the sum of these substances
	Products resulting from the reaction of the amines of edible oils with polyethylene oxide	:	TDI : 0.25 mg/kg b.w.
	Monoethanolamine lauryl sulphate	:	TDI : 0.3 mg/kg b.w.
	Colophony and/or its products of polymerisation, hydrogenation, or disproportionation and their esters of methyl, ethyl or C ₂ - C ₆ polyvalent alcohols, or mixtures of these alcohols	}	TDI: 1 mg/kg b.w. as the sum
	Colophony and/or its products of polymerisation, hydrogenation, or disproportionation condensed with acrylic, maleic, citric, fumaric and/or phthalic acid and/or bisphenol formaldehyde and esterified with methyl, ethyl or C ₂ - C ₆ polyvalent alcohols or mixtures of these alcohols	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	of these substances
	Castor oil and its condensation products with citric, phthalic and sebacic acids	:	TDI: 25 mg/kg b.w. as the sum of these derivatives
	Acetyl tributyl citrate	?	TDI: 1 mg/kg b.w. as the sum
	Acetyl tri(2-ethylhexyl)citrate	3	of these substances
	Di•n• hexyl azelate	:	TDI : 2.5 mg/kg b.w.
(۴	Butylbenzylphthalate	:	TDI: 1 mg/kg b.w.
(٠	Butyl carboxymethylphthalate / Butylphthalyl butyl glycolate /	}	
+)	Methyl carboxymethylethyl phthalate / Methylphthalylethyl glycolate /	\ .\{	TDI : 0.2 mg/kg b.w. as the sum of these substances
(۴	Di.n.butyl and di-isobutyl phthalate	3	
(٠	Dicyclohexyl phthalate	:	TDI : 0.1 mg/kg b.w.
(٠	Di(2-ethylhexyl)phthalate	:	TDI : 0.65 mg/kg b.w.
	2-ethylhexyldiphenyl phosphate	:	TDI : 0.1 mg/kg b.w.
	Dibutyl sebacate	:	TDI : 1.25 mg/kg b.w.
	Di(2-ethylhexyl)sebacate	:	TDI: 2 mg/kg b.w.
	Cetyl alcohol - 1 hexadecanol	:	TDI : 0.5 mg/kg b.w.
	Stearoyl alcohol - 1 octadecanol	:	TDI : 10 mg/kg b.w.

(*

^(*) Please see "Current Review" paragraph 5

Montan waxes, comprising purified montanic (C26 to C32) acids and/or their esters with ethanediol and/or 1-3 butanediol and/or their calcium and potassium salts : TDI : 2 mg/kg b.w. Epoxidised soya-bean oil (oxirane content 6-8%) : TDI : 5 mg/kg b.w. Aliphatic acids $(C_8 - C_{20})$ esterified with mono or di(2 hydroxyethyl)amine : TDI : 0.5 mg/kg b.w. Di-n-octyltin-bis(2-ethylhexyl)maleate : TDI : 0.01 mg/kg b.w. Ethyleneglycol monobutylether Ethyleneglycol monobutylether acetate Ethyleneglycol monoethylether TDI: 0.5 mg/kg b.w. as the sum Ethyleneglycol monoethylether acetate of these solvents Ethyleneglycol monomethylether

3. Substances which in the opinion of the Committee may be used without objection in the manufacture of regenerated cellulose films

Regenerated cellulose

Ethyleneglycol monomethylether acetate

Urea

Linear fatty acids, saturated or unsaturated, with an even number of carbon atoms from 8 to 20 inclusive and ricinoleic acid and their NH₄, Ca, Mg, K, Na, Al and Zn salts

Amides of linear fatty acids, saturated or unsaturated, with an even number of carbon atoms from 8 to 20 inclusive and the amide of ricincleic acid

Magnesium chloride

Esters of glycerol with linear fatty acids, saturated or unsaturated with an even number of carbon atoms from 8 to 20 inclusive and/or ricinoleic acid

Esters of linear fatty acids, saturated or unsaturated, with an even number of carbon atoms from 8 to 20 inclusive and of ricinoleic acid with ethyl, butyl, amyl and oleoyl linear alcohols

Natural edible starches and flours (according to EEC proposed directive)

Edible starches and flours modified by chemical treatment (according to Report of the 27 February 1976 (*)

Condensed urea formaldehyde, modified or not

- (a) Urea formaldehyde
- (b) Urea formaldehydge modified with methanol, ethanol, butanol, diethylenetriamine, triethylenetetramine, tetraethylenepentamine, guanidine, Na₂SO₃, sulphanilic acid, diaminodiethylamine, 3-3' diamino dipropylamine, diaminopropane, diaminobutane, aminomethylsulphonic acid, polyamines obtained from the reaction with ethylenediamine or trimethylenediamine

^(*) Reports of the Scientific Committee for Food (Second Series) December 1976

Ethyl and hydroxyethyl ethers of cellulose Cellulose nitrate Casein Edible gelatine Esters derived from bis(2-hydroxyethyl)ether with addition products of beta-pinene and/or dipentene and/or diterpene and maleic anhydride Damar Gum Poly-beta-pinene (terpenic resins) Di(methylcyclohexyl)phthalate and its isomers [Sextol phthalate] Di-n- and iso-butyl tartrate Glycerol monoacetate / Monoacetin 7 Carnauba wax Beeswax Esparto wax Candellilia wax Refined paraffin and microcrystalline waxes Pentaerythritol tetrastearate Mono and bis(octadecyl-di(ethyleneoxide)) phosphates Butyl acetate Isobutyl acetate Isopropyl acetate Propyl acetate Acetone Butyl alcohol Ethyl alcohol

Isobutyl alcohol

Isopropyl alcohol

Propyl alcohol

Cyclohexane

Methylethyl Ketone

Methylisobutyl Ketone

Tetrahydrofurane

Toluene

4. Substances for which the Committee was unable to give an opinion

Distearate of di-hydroxyethyl di-ethylene triamine monoacetate (*)
2 heptadecyl-4-4 bis (methylenestearate) oxazoline (*)
Polyethylene amino stearamide ethylsulphate (*)
Butylurethaneformaldehyde, condensation product (*)
Phthalimidoethylpropionate (*)

^(*) Studies planned or in progress

REFERENCES

- 1. OJ L 340 of 9.12.1976, p. 19.
- 2. 2642/VI/76.
- 3. Reports of the Scientific Committee for Food (Third Series) January 1977.
- 4. This Report, only for materials and articles in contact with foodstuffs.
- Seventeenth Report JECFA; WHO Techn. Report Series, 1974, No. 539.
 Dix-septième Rapport JECFA; OMS Sér. Rapp. techn., 1974, No. 539.
- 6. Twenty-first Report JECFA; WHO Techn. Report Series, 1978, No. 617. Vingt et unième Rapport JECFA; CMS Sér. Rapp. techn., 1978, No. 617.
- 7. Ninth Report JECFA; WHO Techn. Report Series, 1966, No.339. Neuvième Rapport JECFA; OMS Sér. Rapp. techn., 1966, No. 339.
- 8. Twenty-second Report JECFA; WHO Techn. Report Series, in press Vingt-deuxième Rapport JECFA; OMS Sér. Rapp. techn., sous presse
- 9. Nineteenth Report JECFA; WHO Techn. Report Series, 1975, No. 576. Dix-neuvième Rapport JECFA; CMS Sér. Rapp. techn., 1975, No. 576.
- 10. Eighteenth Report JECFA; WHO Techn. Report Series, 1974, No. 557. Dix-huitième Rapport JECFA; CMS Sér. Rapp. techn., 1974, No. 557.
- 11. Eleventh Report JECFA; WHO Techn. Report Series, 1968, No. 383. Onzième Rapport JECFA; OMS Sér. Rapp. techn., 1968, No. 383.

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The Scientific Committee for Food was established by Commission Decision 74/234/EEC of 16 April 1974 (OJ No. L 136 of 20.5.1974 page 1) to advise it on any problem relating to the protection of the health and safety of persons arising from the consumption of food, and in particular the composition of food, processes which are liable to modify food, the use of food additives and other processing aids as well as the presence of contaminants.

The Members are independent persons, highly qualified in the fields associated with medicine, nutrition, toxicology, biology, chemistry, or other similar disciplines.

The present series relates to opinions on:

- the acceptability from the point of view of health and hygiene, of the use of thiabendazole for the protection of citrus fruit against moulds, and the possibility of raising the maximum residue of thiabendazole in citrus fruit to 10 mg/kg of whole fruit as requested by the users, instead of 6 mg/kg now accepted on a provisional basis by the Community Directive on Preservatives authorized for use in foodstuffs;
- the toxicological acceptability of substances proposed for use in the manufacture of regenerated cellulose films intended to come into contact with foodstuffs. Advice was also requested on whether the suggested technological restrictions are sufficient to ensure the health of the public.





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