COMMISSION OF THE EUROPEAN COMMUNITIES

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Brussels, 15 December 1975

Proposal for a

COUNCIL DIRECTIVE

on the approximation of laws, regulations and administrative provisions relating to the marketing of high nitrogen content ammonium nitrate based fertilizer

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(submitted to the Council by the Commission)

EXPLANATORY MEMORANDUM

I. GENERAL INTRODUCTION

The Resolution of the Council of 28 May 1969 establishing a programme for the elimination of technical barriers to trade in industrial products included proposals for directives for straight and compound fertilizers. The Council is in the final stages of discussion of a general directive dealing with the composition, labelling and packaging of straight and compound fertilizers.

High nitrogen content straight ammonium nitrate fertilizers are of particular interest in agriculture because they are a highly concentrated source of the fertilizing element nitrogen, and a smaller weight of fertilizer has to be transported and stored to achieve the same fertilizing effect as with lower nitrogen content products.

Ammonium nitrate is a chemical which also is used as a material for explosive manufacture in admixtures with oil. An ammonium nitrate of high porosity not only readily adsorbs oil but in itself is more susceptible to the propagation of detonation than low porosity ammonium nitrate. A number of other parameters such as pH and chloride content affect the stability of ammonium nitrate towards heat.

The general directive on the approximation of laws, regulations and administrative provisions concerning the composition, packaging and labelling of fertilizers will remove barriers to trade in the fertilizer market in this respect, however in a number of Member States trade in high nitrogen content ammonium nitrate fertilizer is hampered by provisions concerning its storage and marketing, which create considerable restrictions in certain Member States where ammonium nitrate fertilizer is classed and stored as an explosive. These storage provisons are in most Member States extremely complex and apply to a very wide range of explosive or potentially explosive products. Their harmonisation would therefore be an extremely difficult and complicated task.

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Although in the past there have been serious explosions of large stocks of ammonium nitrate fertilizer with severe loss of life, modern manufacturing techniques can produce a safe and stable fertilizer which is clearly distinguishable from explosive products. The Commission in making this proposal of Directive for classification of ammonium nitrate fertilizer considers that this constitutes an important and essential step to the removal of technical barriers to trade. The clearer definition of fertilizer set out in this directive will allow Member States to amend their storage regulations in respect of ammonium nitrate fertilizer and indeed as a result of the preparation of this proposal several Member States are already starting this work.

Should serious technical barriers to trade continue to exist after the implementation of this directive the Commission will consider a further stage such as proposing common rules for storage.

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II NOTES ON INDIVIDUAL ARTICLES

Article 1

This Article defines the scope of application of the directive and relates it to the general Directive on fertilizers.

Article 2

This Article lays down the procedure for testing and certifying the fertilizer for detonability and porosity before marketing and at regular intervals thereafter. It also lays down the conditions by which a repeat of the certification test may be required.

Article 3

This Article describes the procedure for designation and notification of the authorities competent to carry out the certification procedure.

Article 4

This Article defines the labelling requirements which are additional to those of the main directive on fertilizers and are required for identification of the fertilizer with the certificate.

Article 5

This Article requires the Member States to accept conformity of a properly labelled and certified fertilizer without removing their right to carry out other verification tests.

Article 6

This is a standard free circulation article.

Article 7

This Article requires the Member States to carry out control measures to ensure conformity of fertilizer marketed under the directive with its provisions.

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Article 8

This Article lays down the procedure for adapting the Directive to technical progress.

Article 9

This Article is a standard safeguard clause.

Articles 10 and 11

These Articles are common to all Directives

III CONSULTATION OF INTERESTED PARTIES

The proposal of Directive has been elaborated following extensive consultation with a working party composed of experts on fertilizers, explosives and public and industrial safety in close collaboration with relevant organisations from the industry concerned.

IV CONSULTATION OF THE EUROPEAN PARLIAMENT AND THE ECONOMIC AND SOCIAL COMMITTEE

In application of Article 100, para 2, of the Treaty, taking into account the fact that the application of this Directive implies modification of the existing legal provisions of the Member States, the opinion of the European Parliament and the Economic and Social Committee is necessary.

PROPOSAL FOR A COUNCIL DIRECTIVE

on the approximation of the laws of the Member States concerning ammonium nitrate based fertilizer

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

HAVING REGARD to the Treaty establishing the European Economic Community, and in particular Article 100 thereof;

HAVING REGARD to the proposal from the Commission;

HAVING REGARD to the Opinion of the European Parliament;

HAVING REGARD to the Opinion of the Economic and Social Committee,

WHEREAS the Council Directive of ..... concerning the approximation of the laws of Member States relative to fertilizers has already laid down community rules on the denomination, composition, labelling and packing of the most important simple and compound fertilizers in the Community; whereas ammonium nitrate based fertilizers in particular are envisaged by this directive; whereas it seems however necessary, having regard totthe particular nature of this type of fertilizer and to the consequent requirements of public safety, to fix complementary community rules for this fertilizer.

WHEREAS ammonium nitrate is the essential ingredient of a variety of products some of which are intended for use as fertilizers and others as explosives, and that by reason of the disparity between national dispositions relative to the classification of products used as fertilizer from other products based on ammonium nitrate regulations controlling the marketing of ammonium nitrate based fertilizer differ from one Member State to another; whereas by their disparity they hinder trade in ammonium nitrate based fertilizer within the European Economic Community;

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WHEREAS such obstacles to the establishment of the common market can be reduced and eliminated if the same requirements are adopted by all the Member States either in addition to or in place of their present laws;

WHEREAS it is principally necessary, to this end and in the interest of public safety to determine at Community level the characteristics and properties distinguishing ammonium nitrate based fertilizer from products based on ammonium nitrate manufactured for use as an explosive;

WHEREAS a detonation test is regarded as the prime criterion of approval of a high nitrogen content ammonium nitrate based fertilizer, and whereas for each fertilizer product a detonation test must be carried out before the marketing of the fertilizer and at fixed intervals thereafter, and whereas it is necessary to relate the results of this test to other important parameters such as porosity having a correlation with detonability;

WHEREAS the determination of the methods of analysis, as well as any changes or additions to be made thereto in consideration of technical progress, are implementing measures of a technical nature, and whereas it is appropriate to assign their adoption to the Commission in order to simplify and speed up the procedure;

WHEREAS technical progress necessitates the rapid adaptation of the technical requirements of this directive; whereas a procedure has already been established under articles 10 and 11 of Council Directive of ..... regarding the approximation of the laws of Member States concerning fertilizers, with a view to adapting directives in the field of fertilizers to technical progress.

HAS ADOPTED THIS DIRECTIVE:

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Article 1

1. This Directive shall apply to straight high nitrogen content ammonium nitrate based fertilizers which are covered by the provisions of Council Directive of ..... on the approximation of the laws of Member States concerning fertilizers.

2. For the purposes of this directive, fertilizer means "straight high nitrogen content ammonium nitrate based fertilizer", which is a chemically obtained product containing at least 28% by weight nitrogene as its essential ingredient which may contain inorganic additives or fillers, such as ground limestone, calcium sulphate, ground dolomite, magnesium sulphate, kisserite.

3. Inorganic additives or fillers are substances used in the compounding of the fertilizer which must not increase its sensitivity to heat or detonation.

Article 2

2.1a Before a high nitrogen content straight ammonium nitrate based fertilizer is marketed, one of the competent authorities designated under the terms of Article 3 will submit a representative sample of the fertilizer type to the tests specified in Annex I of this directive.

2.1b Where the fertilizer type has an oil retention after thermal cycling as specified in Annex I, para 2, of 4% or less, the above procedure shall be repeated at annual intervals.

2.1c Where the fertilizer type has an oil retention after thermal cycling as specified in Annex I, para 2, of 4% or greater, but not exceeding 7%, the above procedure shall be repeated at four monthly intervals.

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2.2 Where a fertilizer complies with the provisions of Annex I a certificate stating the date and the results of the above tests together with the manufacturers name, address and product number of the fertilizer and any other relevant information must be transmitted to the competent administrative authorities of the Member States.

2.3 A change in chemical formulation, fillers or additives requires the carrying out of a new approval procedure.

2.4 If in a spot check the oil retention capacity without artificial thermal cycling laid down in para 1, Annex II exceeds 4% and is higher than the value on the certificate for the test with thermal cycling laid down in para 2, Annex I by 1.0% or more a Member State may require that a consignment be resubmitted to the detonation test laid down in Annex I or that the fertilizer be withdrawn from sale or returned to the manufacturer until the results of the detonation test are known.

Article 3

Each Member State shall notify the other Member States and the Commission of the names and addresses of the competent authorities within their territory whom they may designate to carry out the testing procedure for Annex I, specified in Article 2 of this directive. The names and addresses shall be published for information in the Official Journal of the European Communities.

Article 4

In addition to the inscriptions required by Council Directive of and in accordance with its general provisions on labelling, the labels or accompanying documents of straight high nitrogen content ammonium nitrate based fertilizer marketed under this directive shall bear the manufacturer's product number for the fertilizer.

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Article 5

Without prejudice to other methods of proof the Member States shall take all necessary measures to ensure that their competent authorities shall accept that there is a presumption of conformity with the requirements of Annex I, where the label or accompanying documents bear a manufacturer's name and product number for a fertilizer for which they have been notified that the procedure of Article 2, paras 1 and 2 has been carried out.

Article 6

The Member States may not, refuse, prohibit or restrict the marketing of a fertilizer which complies with the requirements of this Directive and the Annexes thereto.

Article 7

The Member States shall take all the necessary measures to ensure that straight high nitrogen content ammonium nitrate based fertilizers marketed with the marking "EEC fertilizer" are subjected to official control measures for the purposes of verifying that they comply with this Directive and with its Annex II.

Article 8

1. Any amendments which are necessary in order to adapt the annexes of this directive to technical progress shall be adopted in accordance with the procedure laid down in Article 11 of Council Directive of on the approximation of laws of Member States administrative provisions concerning fertilizers.

2. The sampling method and the analysis techniques shall likewise be determined in accordance with the same procedure.

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Article 9

1. If a Member State notes, on the basis of a substantive justification that a straight high nitrogen content ammonium nitrate fertilizer, although complying with the requirements of the Directive, represents a hazard to safety, it may provisionally prohibit the sale of the product in its territory or subject it to special conditions. It shall immediately inform the other Member States and the Commission thereof, stating the grounds for its decision.

2. The Commission shall, within six weeks, consult the Member States concerned, following which it shall deliver its opinion without delay and take the appropriate steps.

3. If the Commission is of the opinion that technical adaptations to the Directive are necessary, such adaptations shall be adopted by either the Commission or the Council in accordance with the procedure referred to in Article 8. In that case, the Member State having adopted safeguard measures may maintain them until the entry into force of the adaptations.

Article 10

1. Member States shall adopt and publish before 1 July 1977, the provisions needed in order to comply with this Directive, and shall forthwith inform the Commission thereof. They shall apply these provisons as of 1 January 1978.

2. On notification of this Directive, Member States shall inform the Commission in time to enable it to put forward its comments, of all draft laws, regulations or administrative provisions which they contemplate adopting in the field covered by this Directive.

Article 11

This Directive is addressed to the Member States.

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ANNEX I

Product tests to be carried out in accordance with the procedure specified in Article 3.

These tests shall be carried out on a representative sample of fertilizer and shall be completed within 30 days of the date of production of the fertilizer. Before being tested for both detonability and oil retention the whole mass of the sample shall be thermally cycled five times between 25°C and 50°C.

1. Detonability test

The fertilizer shall be subjected to a detonability test in a horizontal steel tube under the following conditions.

Tube material	Steel - ISO strong (NBN 53 201) or similar
Tube length	1000 mm
External diameter	114 mm
Wall thickness	5 mm
Booster	500 g dynamite containing between 22 to 28% explosive oil
Test temperature	25°C
Witness lead cylinders for detecting detonation	50 mm diameter 100 mm high

placed at 150 mm intervals and supporting the tube horizontally.

The test shall be carried out twice. The fertilizer shall be deemed to have satisfied the test if in both tests one or more of the supporting lead cylinders is crushed by less than 5%.

2. Oil retention

The oil retention of a sample of fertilizer which has been offered for sale by the manufacturer or importer, and has been subjected to five thermal cycles between 25°C and 50°C shall not exceed 7% by weight. The result shall be obtained by taking the mean of five determinations.

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ANNEX II

Straight high nitrogen content ammonium nitrate fertilizer at any stage of its marketing shall comply with the following requirements:-

1. Porosity (Oil retention)

The oil retention of the fertilizer shall not exceed 7% by weight.

2. Combustible material

The weight percentage of combustible material measured as carbon shall not exceed 0.2% for fertilizers having a nitrogen content of at least 31.5% N by weight and shall not exceed 0.4% for fertilizers having a nitrogen content of at least 28% but less than 31.5% by weight

3. pH

A solution containing the soluble portion of 10 g of the fertilizer in 100 ml of water must have a pH of at least 4.5.

4. Size analysis

Not more than 5% by weight of the fertilizer shall pass through a 1 mm mesh sieve and not more than 3% by weight shall pass through a 0.5 mm mesh sieve.

5. Chlorine

The maximum chlorine content of the fertilizer shall be 0.1% by weight.