II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DIRECTIVE

of 24 June 1982

on the major-accident hazards of certain industrial activities

(82/501/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas the objectives and principles of the Community environment policy were fixed by the action programmes of the European Communities on the environment of 22 November 1973 (4) and 17 May 1977 (5), and having regard in particular to the principle that the best policy consists in preventing the creation of pollution or nuisances at source; whereas to this end technical progress should be conceived and directed so as to meet the concern for the protection of the environment;

Whereas the objectives of the Community policy of health and safety at work were fixed by the Council resolution of 29 June 1978 on an action programme of the European Communities on safety and health at work (6), and having regard in particular to the principle that the best policy consists in obviating possible accidents at source by the integration of safety at the various stages of design, construction and operation;

Whereas the Advisory Committee on Safety, Hygiene and Health Protection at Work, set up by Decision 74/325/EEC (7), has been consulted;

Whereas the protection of the public and the environment and safety and health protection at work call for particular attention to be given to certain industrial activities capable of causing major accidents; whereas such accidents have already occurred in the Community and have had serious consequences for workers and, more generally, for the public and the environment;

Whereas, for every industrial activity which involves, or may involve, dangerous substances and which, in the event of a major accident, may have serious consequences for man and the environment, the manufacturer must take all necessary measures to prevent such accident and to limit the consequences thereof;

(1) OJ No C 212, 24. 8. 1979, p. 4.
(2) OJ No C 175, 14. 7. 1980, p. 48.
(3) OJ No C 182, 21. 7. 1980, p. 25.
(4) OJ No C 112, 20. 12. 1973, p. 1.
(5) OJ No C 139, 13. 6. 1977, p. 1.
(6) OJ No C 165, 11. 7. 1978, p. 1.
(7) OJ No L 185, 9. 7. 1974, p. 15.

Whereas the training and information of persons working on an industrial site can play a particularly important part in preventing major accidents and bringing the situation under control in the event of such accidents;

Whereas, in the case of industrial activities which involve or may involve substances that are particularly dangerous in certain quantities, it is necessary for the manufacturer to provide the competent authorities with information including details of the substances in question and high-risk installations and situations, with a view to reducing the hazards of major accidents and enabling the necessary steps to be taken to reduce their consequences;

Whereas it is necessary to lay down that any person outside the establishment liable to be affected by a major accident should be appropriately informed of the safety measures to be taken and of the correct behaviour to be adopted in the event of an accident;

Whereas, if a major accident occurs, the manufacturer must immediately inform the competent authorities and communicate the information necessary for assessing the impact of that accident;

Whereas Member States should forward information to the Commission regarding major accidents occurring on their territory, so that the Commission can analyze the hazards from major accidents;

Whereas this Directive does not preclude the conclusion by a Member State of agreements with third countries concerning the exchange of information to which it is privy at internal level other than that obtained through the Community arrangements for the exchange of information set up by this Directive;

Whereas disparity between provisions already applicable or being prepared in the various Member States on measures to prevent major accidents and limit their consequences for man and the environment may create unequal conditions of competition and hence directly affect the functioning of the common market; whereas the approximation of laws provided for in Article 100 of the Treaty should therefore be carried out in this field;

Whereas it seems necessary to combine this approximation of laws with action by the Community aimed at attaining one of the Community objectives in the field of environmental protection and health and safety at work; whereas, in pursuance of this aim, certain specific provisions should therefore be laid down; whereas, since the necessary powers have not been provided by the Treaty, Article 235 of the Treaty should be invoked,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. This Directive is concerned with the prevention of major accidents which might result from certain industrial activities and with the limitation of their consequences for man and the environment. It is directed in particular towards the approximation of the measures taken by Member States in this field.

2. For the purposes of this Directive:

(a) *Industrial activity* means:

— any operation carried out in an industrial installation referred to in Annex I involving, or possibly involving, one or more dangerous substances and capable of presenting major-accident hazards, and also transport carried out within the establishment for internal reasons and the storage associated with this operation within the establishment,

— any other storage in accordance with the conditions specified in Annex II;

(b) *Manufacturer* means:

— any person in charge of an industrial activity;

(c) *Major accident* means:

— an occurrence such as a major emission, fire or explosion resulting from uncontrolled developments in the course of an industrial activity, leading to a serious danger to man, immediate or delayed, inside or outside the establishment, and/or to the environment, and involving one or more dangerous substances;

(d) *Dangerous substances* means:

— for the purposes of Articles 3 and 4, substances generally considered to fulfil the criteria laid down in Annex IV,

— for the purposes of Article 5, substances in the lists in Annex III and Annex II in the quantities referred to in the second column.

Article 2

This Directive does not apply to the following:

1. nuclear installations and plant for the processing of radioactive substances and material;
2. military installations;
3. the manufacture and separate storage of explosives, gunpowder and munitions;
4. extraction and other mining operations;
5. installations for the disposal of toxic and dangerous waste which are covered by Community Acts in so far as the purpose of those Acts is the prevention of major accidents. .

Article 3

Member States shall adopt the provisions necessary to ensure that, in the case of any of the industrial activities specified in Article 1, the manufacturer is obliged to take all the measures necessary to prevent major accidents and to limit their consequences for man and the environment.

Article 4

Member States shall take the measures necessary to ensure that all manufacturers are required to prove to the competent authority at any time, for the purposes of the controls referred to in Article 7 (2), that they have identified existing major-accident hazards, adopted the appropriate safety measures, and provided the persons working on the site with information, training and equipment in order to ensure their safety.

Article 5

1. Without prejudice to Article 4, Member States shall introduce the necessary measures to require the manufacturer to notify the competent authorities specified in Article 7:

— if, in an industrial activity as defined in Article 1 (2) (a), first indent, one or more of the dangerous substances listed in Annex III are involved, or it is recognized that they may be involved, in the quantities laid down in the said Annex, such as:
  — substances stored or used in connection with the industrial activity concerned,
  — products of manufacture,
  — by-products, or
  — residues,

— or if, in an industrial activity as defined in Article 1 (2) (a), second indent, one or more of the dangerous substances listed in Annex II are stored in the quantities laid down in the second column of the same Annex.

The notification shall contain the following:

(a) information relating to substances listed, respectively, in Annex II and Annex III, that is to say:
  — the data and information listed in Annex V,
  — the stage of the activity in which the substances are involved or may be involved,
  — the quantity (order of magnitude),
  — the chemical and/or physical behaviour under normal conditions of use during the process,
  — the forms in which the substances may occur or into which they may be transformed in the case of abnormal conditions which can be foreseen,
  — if necessary, other dangerous substances whose presence could have an effect on the potential hazard presented by the relevant industrial activity;

(b) information relating to the installations, that is to say:
  — the geographical location of the installations and predominant meteorological conditions and sources of danger arising from the location of the site,
  — the maximum number of persons working on the site of the establishment and particularly of those persons exposed to the hazard,
  — a general description of the technological processes,
  — a description of the sections of the establishment which are important from the safety point of view, the sources of hazard and the conditions under which a major accident could occur, together with a description of the preventive measures planned,
  — the arrangements made to ensure that the technical means necessary for the safe operation of plant and to deal with any malfunctions that arise are available at all times;

(c) information relating to possible major-accident situations, that is to say:
  — emergency plans, including safety equipment, alarm systems and resources available for use

inside the establishments in dealing with a major accident,

— any information necessary to the competent authorities to enable them to prepare emergency plans for use outside the establishment in accordance with Article 7 (1),

— the names of the person and his deputies or the qualified body responsible for safety and authorized to set the emergency plans in motion and to alert the competent authorities specified in Article 7.

2. In the case of new installations, the notification referred to in paragraph 1 must reach the competent authorities a reasonable length of time before the industrial activity commences.

3. The notification specified in paragraph 1 shall be updated periodically to take account of new technical knowledge relative to safety and of developments in knowledge concerning the assessment of hazards.

4. In the case of industrial activities for which the quantities, by substance, laid down in Annex II or III, as appropriate, are exceeded in a group of installations belonging to the same manufacturer which are less than 500 metres apart, the Member States shall take the necessary steps to ensure that the manufacturer supplies the amount of information required for the notification referred to in paragraph 1, without prejudice to Article 7, having regard to the fact that the installations are a short distance apart and that any major-accident hazards may therefore be aggravated.

Article 6

In the event of modification of an industrial activity which could have significant consequences as regards major-accident hazards, the Member States shall take appropriate measures to ensure that the manufacturer:

— revises the measures specified in Articles 3 and 4,

— informs the competent authorities referred to in Article 7 in advance, if necessary, of such modification in so far as it affects the information contained in the notification specified in Article 5.

Article 7

1. The Member States shall set up or appoint the competent authority or authorities who, account being taken of the responsibility of the manufacturer, are responsible for:

— receiving the notification referred to in Article 5 and the information referred to in the second indent of Article 6,

— examining the information provided,

— ensuring that an emergency plan is drawn up for action outside the establishment in respect of whose industrial activity notification has been given,

and, if necessary,

— requesting supplementary information,

— ascertaining that the manufacturer takes the most appropriate measures, in connection with the various operations involved in the industrial activity for which notification has been given, to prevent major accidents and to provide the means for limiting the consequences thereof.

2. The competent authorities shall organize inspections or other measures measures of control proper to the type of activity concerned, in accordance with national regulations.

Article 8

1. Member States shall ensure that persons liable to be affected by a major accident originating in a notified industrial activity within the meaning of Article 5 are informed in an appropriate manner of the safety measures and of the correct behaviour to adopt in the event of an accident.

2. The Member States concerned shall at the same time make available to the other Member States concerned, as a basis for all necessary consultation within the framework of their bilateral relations, the same information as that which is disseminated to their own nationals.

Article 9

1. This Directive shall apply to both new and existing industrial activities.

2. 'New industrial activity' shall also include any modification to an existing industrial activity likely to have important implications for major-accident hazards.

3. In the case of existing industrial activities, this Directive shall apply at the latest on 8 January 1985.

However, as regards the application of Article 5 to an existing industrial activity, the Member States shall ensure that the manufacturer shall submit to the

competent authority, at the latest on 8 January 1985, a declaration comprising:

— name or trade name and complete address,

— registered place of business of the establishment and complete address,

— name of the director in charge,

— type of activity,

— type of production or storage,

— an indication of the substances or category of substances involved, as listed in Annexes II or III.

4. Moreover, Member States shall ensure that the manufacturer shall, at the latest on 8 July 1989, supplement the declaration provided for in paragraph 3, second subparagraph, with the data and information specified in Article 5. Manufacturers shall normally be obliged to forward such supplementary declaration to the competent authority; however, Member States may waive the obligation on manufacturers to submit the supplementary declaration; in that event such declaration shall be submitted to the competent authority at the explicit request of the latter.

Article 10

1. Member States shall take the necessary measures to ensure that, as soon as a major accident occurs, the manufacturer shall be required:

(a) to inform the competent authorities specified in Article 7 immediately;

(b) to provide them with the following information as soon as it becomes available:

— the circumstances of the accident,

— the dangerous substances involved within the meaning of Article 1 (2) (d),

— the data available for assessing the effects of the accident on man and the environment,

— the emergency measures taken;

(c) to inform them of the steps envisaged:

— to alleviate the medium and long-term effects of the accident,

— to prevent any recurrence of such an accident.

2. The Member States shall require the competent authorities:

(a) to ensure that any emergency and medium and long-term measures which may prove necessary are taken;

(b) to collect, where possible, the information necessary for a full analysis of the major accident and possibly to make recommendations.

Article 11

1. Member States shall inform the Commission as soon as possible of major accidents which have occurred within their territory and shall provide it with the information specified in Annex VI as soon as it becomes available.

2. Member States shall inform the Commission of the name of the organization which might have relevant information on major accidents and which is able to advise the competent authorities of the other Member States which have to intervene in the event of such an accident.

3. Member States may notify the Commission of any substance which in their view should be added to Annexes II and III and of any measures they may have taken concerning such substances. The Commission shall forward this information to the other Member States.

Article 12

The Commission shall set up and keep at the disposal of the Member States a register containing a summary of the major accidents which have occurred within the territory of the Member States, including an analysis of the causes of such accidents, experience gained and measures taken, to enable the Member States to use this information for prevention purposes.

Article 13

1. Information obtained by the competent authorities in pursuance of Articles 5, 6, 7, 9, 10 and 12 and by the Commission in pursuance of Article 11 may not be used for any purpose other than that for which it was requested.

2. However this Directive shall not preclude the conclusion by a Member State of agreements with third

countries concerning the exchange of information to which it is privy at internal level other than that obtained through the Community machinery for the exchange of information set up by the Directive.

3. The Commission and its officials and employees shall not divulge the information obtained in pursuance of this Directive. The same requirement shall apply to officials and employees of the competent authorities of the Member States as regards any information they obtain from the Commission.

Nevertheless, such information may be supplied:

— in the case of Articles 12 and 18,

— when a Member State carries out or authorizes the publication of information concerning that Member State itself.

4. Paragraphs 1, 2 and 3 shall not preclude the publication by the Commission of general statistical data or information on matters of safety containing no specific details regarding particular undertakings or groups of undertakings and not jeopardizing industrial secrecy.

Article 14

The amendments necessary for adapting Annex V to technical progress shall be adopted in accordance with the procedure specified in Article 16.

Article 15

1. For the purposes of applying Article 14, a Committee responsible for adapting this Directive to technical progress (hereinafter referred to as 'the Committee') is hereby set up. It shall consist of representatives of the Member States and be chaired by a representative of the Commission.

2. The Committee shall draw up its own rules of procedure.

Article 16

1. Where the procedure laid down in this Article is to be followed, matters shall be referred to the Committee by the chairman, either on his own initiative or at the request of the representative of a Member State.

2. The representative of the Commission shall submit to the Committee a draft of the measures to be adopted. The Committee shall deliver its opinion on the draft within a time limit which may be determined by the chairman according to the urgency of the matter. It shall decide by a majority of 45 votes, the votes of the Member States being weighted as provided for in Article 148 (2) of the Treaty. The chairman shall not vote.

3. (a) The Commission shall adopt the measures envisaged where these are in accordance with the opinion of the Committee.

(b) Where the measures envisaged are not in accordance with the opinion of the Committee, or in the absence of an opinion, the Commission shall forthwith submit a proposal to the Council on the measures to be adopted. The Council shall act by a qualified majority.

(c) If the Council does not act within three months of the proposal being submitted to it, the measures proposed shall be adopted by the Commission.

Article 17

This Directive shall not restrict the right of the Member States to apply or to adopt administrative or legislative measures ensuring greater protection of man and the environment than that which derives from the provisions of this Directive.

Article 18

Member States and the Commission shall exchange information on the experience acquired with regard to the prevention of major accidents and the limitation of their consequences; this information shall concern, in particular, the functioning of the measures provided for in this Dircetive. Five years after notification of this Directive, the Commission shall forward to the Council and the European Parliament a report on its application which it shall draw up on the basis of this exchange of information.

Article 19

At the latest on 8 January 1986 the Council shall, on a proposal from the Commission, review Annexes I, II and III.

Article 20

1. Member States shall take the measures necessary to comply with this Directive at the latest on 8 January 1984. They shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the provisions of national law which they adopt in the field covered by this Directive.

Article 21

This Directive is addressed to the Member States.

Done at Luxembourg, 24 June 1982.

For the Council

The President

F. AERTS

ANNEX I

INDUSTRIAL INSTALLATIONS WITHIN THE MEANING OF ARTICLE 1

1. — Installations for the production or processing of organic or inorganic chemicals using for this purpose, in particular:
   - — alkylation
   - — amination by ammonolysis
   - — carbonylation
   - — condensation
   - — dehydrogenation
   - — esterification
   - — halogenation and manufacture of halogens
   - — hydrogenation
   - — hydrolysis
   - — oxidation
   - — polymerization
   - — sulphonation
   - — desulphurization, manufacture and transformation of sulphur-containing compounds
   - — nitration and manufacture of nitrogen-containing compounds
   - — manufacture of phosphorus-containing compounds
   - — formulation of pesticides and of pharmaceutical products.

   — Installations for the processing of organic and inorganic chemical substances, using for this purpose, in particular:
   - — distillation
   - — extraction
   - — solvation
   - — mixing.

2. Installations for distillation, refining or other processing of petroleum or petroleum products.

3. Installations for the total or partial disposal of solid or liquid substances by incineration or chemical decomposition.

4. Installations for the production or processing of energy gases, for example, LPG, LNG, SNG.

5. Installations for the dry distillation of coal or lignite.

6. Installations for the production of metals or non-metals by the wet process or by means of electrical energy.

ANNEX II

STORAGE AT INSTALLATIONS OTHER THAN THOSE COVERED BY ANNEX I ('ISOLATED STORAGE')

The quantities set out below relate to each installation or group of installations belonging to the same manufacturer where the distance between the installations is not sufficient to avoid, in foreseeable circumstances, any aggravation of major-accident hazards. These quantities apply in any case to each group of installations belonging to the same manufacturer where the distance between the installations is less than approximately 500 m.

Substances or groups of substances	Quantities (tonnes) ≥	
	For application of Articles 3 and 4	For application of Article 5
1. Flammable gases as defined in Annex IV (c) (i)	50	300 (1)
2. Highly flammable liquids as defined in Annex IV (c) (ii)	10 000	100 000
3. Acrylonitrile	350	5 000
4. Ammonia	60	600
5. Chlorine	10	200
6. Sulphur dioxide	20	500
7. Ammonium nitrate	500 (2)	5 000 (2)
8. Sodium chlorate	25	250 (2)
9. Liquid oxygen	200	2 000 (2)

(1) Member States may provisionally apply Article 5 to quantities of at least 500 tonnes until the revision of Annex II mentioned in Article 19.

(2) Where this substance is in a state which gives it properties capable of creating a major-accident hazard.

ANNEX III

LIST OF SUBSTANCES FOR THE APPLICATION OF ARTICLE 5

The quantities set out below relate to each installation or group of installations belonging to the same manufacturer where the distance between the installations is not sufficient to avoid, in foreseeable circumstances, any aggravation of major-accident hazards. These quantities apply in any case to each group of installations belonging to the same manufacturer where the distance between the installations is less than approximately 500 m.

Name	Quantity (≥)	CAS No	EEC No
1. 4-Aminodiphenyl	1 kg	92-67-1	
2. Benzidine	1 kg	92-87-5	612-042-00-2
3. Benzidine salts	1 kg		
4. Dimethylnitrosamine	1 kg	62-75-9	
5. 2-Naphthylamine	1 kg	91-59-8	612-022-00-3
6. Beryllium (powders, compounds)	10 kg		
7. Bis(chloromethyl)ether	1 kg	542-88-1	603-046-00-5
8. 1,3-Propanesultone	1 kg	1120-71-4	
9. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1 kg	1746-01-6	
10. Arsenic pentoxide, Arsenic (V) acid and salts	500 kg		
11. Arsenic trioxide, Arsenious (III) acid and salts	100 kg		
12. Arsenic hydride (Arsine)	10 kg	7784-42-1	
13. Dimethylcarbamoyl chloride	1 kg	79-44-7	
14. 4-(Chloroformyl) morpholine	1 kg	15159-40-7	
15. Carbonyl chloride (Phosgene)	20 t	75-44-5	006-002-00-8
16. Chlorine	50 t	7782-50-5	017-001-00-7
17. Hydrogen sulphide	50 t	7783-06-04	016-001-00-4
18. Acrylonitrile	200 t	107-13-1	608-003-00-4
19. Hydrogen cyanide	20 t	74-90-8	006-006-00-X
20. Carbon disulphide	200 t	75-15-0	006-003-00-3
21. Bromine	500 t	7726-95-6	035-001-00-5
22. Ammonia	500 t	7664-41-7	007-001-00-5
23. Acetylene (Ethyne)	50 t	74-86-2	601-015-00-0
24. Hydrogen	50 t	1333-74-0	001-001-00-9
25. Ethylene oxide	50 t	75-21-8	603-023-00-X
26. Propylene oxide	50 t	75-56-9	603-055-00-4
27. 2-Cyanopropan-2-ol (Acetone cyanohydrin)	200 t	75-86-5	608-004-00-X
28. 2-Propenal (Acrolein)	200 t	107-02-8	605-008-00-3
29. 2-Propen-1-ol (Allyl alcohol)	200 t	107-18-6	603-015-00-6
30. Allylamine	200 t	107-11-9	612-046-00-4
31. Antimony hydride (Stibine)	100 kg	7803-52-3	
32. Ethyleneimine	50 t	151-56-4	613-001-00-1

Name	Quantity (≥)	CAS No	EEC No
33. Formaldehyde (concentration ≥ 90 %)	50 t	50-00-0	605-001-01-2
34. Hydrogen phosphide (Phosphine)	100 kg	7803-51-2	
35. Bromomethane (Methyl bromide)	200 t	74-83-9	602-002-00-3
36. Methyl isocyanate	1 t	624-83-9	615-001-00-7
37. Nitrogen oxides	50 t	11104-93-1	
38. Sodium selenite	100 kg	10102-18-8	
39. Bis(2-chloroethyl) sulphide	1 kg	505-60-2	
40. Phosacetim	100 kg	4104-14-7	015-092-00-8
41. Tetraethyl lead	50 t	78-00-2	
42. Tetramethyl lead	50 t	75-74-1	
43. Promurit (1-(3,4-Dichlorophenyl)-3-triazenethio-carboxamide)	100 kg	5836-73-7	
44. Chlorfenvinphos	100 kg	470-90-6	015-071-00-3
45. Crimidine	100 kg	535-89-7	613-004-00-8
46. Chloromethyl methyl ether	1 kg	107-30-2	
47. Dimethyl phosphoramidocyanidic acid	1 t	63917-41-9	
48. Carbophenothion	100 kg	786-19-6	015-044-00-6
49. Dialifos	100 kg	10311-84-9	015-088-00-6
50. Cyanthoate	100 kg	3734-95-0	015-070-00-8
51. Amiton	1 kg	78-53-5	
52. Oxydisulfoton	100 kg	2497-07-6	015-096-00-X
53. 00-Diethyl S-ethylsulphinylmethyl phosphorothioate	100 kg	2588-05-8	
54. 00-Diethyl S-ethylsulphonylmethyl phosphorothioate	100 kg	2588-06-9	
55. Disulfoton	100 kg	298-04-4	015-060-00-3
56. Demeton	100 kg	8065-48-3	
57. Phorate	100 kg	298-02-2	015-033-00-6
58. 00-Diethyl S-ethylthiomethyl phosphorothioate	100 kg	2600-69-3	
59. 00-Diethyl S-isopropylthiomethyl phosphorodithioate	100 kg	78-52-4	
60. Pyrazoxon	100 kg	108-34-9	015-023-00-1
61. Pensulfothion	100 kg	115-90-2	015-090-00-7
62. Paraoxon (Diethyl 4-nitrophenyl phosphate)	100 kg	311-45-5	
63. Parathion	100 kg	56-38-2	015-034-00-1
64. Azinphos-ethyl	100 kg	2642-71-9	015-056-00-1
65. 00-Diethyl S-propylthiomethyl phosphorodithioate	100 kg	3309-68-0	
66. Thionazin	100 kg	297-97-2	
67. Carbofuran	100 kg	1563-66-2	006-026-00-9
68. Phosphamidon	100 kg	13171-21-6	015-022-00-6
69. Tirpate (2,4-Dimethyl-1,3-dithiolane-2-carboxaldehyde 0-methylcarbamoyloxime)	100 kg	26419-73-8	
70. Mevinphos	100 kg	7786-34-7	015-020-00-5
71. Parathion-methyl	100 kg	298-00-0	015-035-00-7

Name	Quantity (≥)	CAS No	EEC No
72. Azinphos-methyl	100 kg	86-50-0	015-039-00-9
73. Cycloheximide	100 kg	66-81-9	
74. Diphacinone	100 kg	82-66-6	
75. Tetramethylenedisulphotetramine	1 kg	80-12-6	
76. EPN	100 kg	2104-64-5	015-036-00-2
77. 4-Fluorobutyric acid	1 kg	462-23-7	
78. 4-Fluorobutyric acid, salts	1 kg		
79. 4-Fluorobutyric acid, esters	1 kg		
80. 4-Fluorobutyric acid, amides	1 kg		
81. 4-Fluorocrotonic acid	1 kg	37759-72-1	
82. 4-Fluorocrotonic acid, salts	1 kg		
83. 4-Fluorocrotonic acid, esters	1 kg		
84. 4-Fluorocrotonic acid, amides	1 kg		
85. Fluoroacetic acid	1 kg	144-49-0	607-081-00-7
86. Fluoroacetic acid, salts	1 kg		
87. Fluoroacetic acid, esters	1 kg		
88. Fluoroacetic acid, amides	1 kg		
89. Fluenetil	100 kg	4301-50-2	607-078-00-0
90. 4-Fluoro-2-hydroxybutyric acid	1 kg		
91. 4-Fluoro-2-hydroxybutyric acid, salts	1 kg		
92. 4-Fluoro-2-hydroxybutyric acid, esters	1 kg		
93. 4-Fluoro-2-hydroxybutyric acid, amides	1 kg		
94. Hydrogen fluoride	50 t	7664-39-3	009-002-00-6
95. Hydroxyacetonitrile (Glycolonitrile)	100 kg	107-16-4	
96. 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	100 kg	19408-74-3	
97. Isodrin	100 kg	465-73-6	602-050-00-4
98. Hexamethylphosphoramide	1 kg	680-31-9	
99. Juglone (5-Hydroxynaphthalene-1,4-dione)	100 kg	481-39-0	
100. Warfarin	100 kg	81-81-2	607-056-00-0
101. 4,4'-Methylenebis (2-chloroaniline)	10 kg	101-14-4	
102. Ethion	100 kg	563-12-2	015-047-00-2
103. Aldicarb	100 kg	116-06-3	006-017-00-X
104. Nickel tetracarbonyl	10 kg	13463-39-3	028-001-00-1
105. Isobenzan	100 kg	297-78-9	602-053-00-0
106. Pentaborane	100 kg	19624-22-7	
107. 1-Propen-2-chloro-1,3-diol-diacetate	10 kg	10118-72-6	
108. Propyleneimine	50 t	75-55-8	
109. Oxygen difluoride	10 kg	7783-41-7	
110. Sulphur dichloride	1 t	10545-99-0	016-013-00-X
111. Selenium hexafluoride	10 kg	7783-79-1	

Name	Quantity (≥)	CAS No	EEC No
112. Hydropen selenide	10 kg	7783-07-5	
113. TEPP	100 kg	107-49-3	015-025-00-2
114. Sulfotep	100 kg	3689-24-5	015-027-00-3
115. Dimefox	100 kg	115-26-4	015-061-00-9
116. 1-Tri(cyclohexyl) stannyl-1H-1,2,4-triazole	100 kg	41083-11-8	
117. Triethylenemelamine	10 kg	51-18-3	
118. Cobalt (powders, compounds)	100 kg		
119. Nickel (powders, compounds)	100 kg		
120. Anabasine	100 kg	494-52-0	
121. Tellurium hexafluoride	100 kg	7783-80-4	
122. Trichloromethanesulphenyl chloride	100 kg	594-42-3	
123. 1,2-Dibromoethane (Ethylene dibromide)	50 t	106-93-4	602-010-00-6
124. Flammable substances as defined in Annex IV (c) (i)	200 t		
125. Flammable substances as defined in Annex IV (c) (ii)	50 000 t		
126. Diazodinitrophenol	10 t	7008-81-3	
127. Diethylene glycol dinitrate	10 t	693-21-0	603-033-00-4
128. Dinitrophenol, salts	50 t		609-017-00-3
129. 1-Guanyl-4-nitrosaminoguanyl-1-tetrazene	10 t	109-27-3	
130. Bis (2,4,6-trinitrophenyl)amine	50 t	131-73-7	612-018-00-1
131. Hydrazine nitrate	50 t	13464-97-6	
132. Nitroglycerine	10 t	55-63-0	603-034-00-X
133. Pentaerythritol tetranitrate	50 t	78-11-5	603-035-00-5
134. Cyclotrimethylene trinitramine	50 t	121-82-4	
135. Trinitroaniline	50 t	26952-42-1	
136. 2,4,6-Trinitroanisole	50 t	606-35-9	609-011-00-0
137. Trinitrobenzene	50 t	25377-32-6	609-005-00-8
138. Trinitrobenzoic acid	50 t	35860-50-5 129-66-8	
139. Chlorotrinitrobenzene	50 t	28260-61-9	610-004-00-X
140. N-Methyl-N,2,4,6-N-tetranitroaniline	50 t	479-45-8	612-017-00-6
141. 2,4,6-Trinitrophenol (Picric acid)	50 t	88-89-1	609-009-00-X
142. Trinitrocresol	50 t	28905-71-7	609-012-00-6
143. 2,4,6-Trinitrophenetole	50 t	4732-14-3	
144. 2,4,6-Trinitroresorcinol (Styphnic acid)	50 t	82-71-3	609-018-00-9
145. 2,4,6-Trinitrotoluene	50 t	118-96-7	609-008-00-4
146. Ammonium nitrate [1]	5 000 t	6484-52-2	
147. Cellulose nitrate (containing > 12·6 % nitrogen)	100 t	9004-70-0	603-037-00-6
148. Sulphur dioxide	1 000 t	7446-09-05	016-011-00-9
149. Hydrogen chloride (liquefied gas)	250 t	7647-01-0	017-002-00-2
150. Flammable substances as defined in Annex IV (c) (iii)	200 t		

Name	Quantity (≥)	CAS No	EEC No
151. Sodium chlorate (1)	250 t	7775-09-9	017-005-00-9
152. tert-Butyl peroxyacetate (concentration ≥ 70 %)	50 t	107-71-1	
153. tert-Butyl peroxyisobutyrate (concentration ≥ 80 %)	50 t	109-13-7	
154. tert-Butyl peroxymaleate (concentration ≥ 80 %)	50 t	1931-62-0	
155. tert-Butyl peroxy isopropyl carbonate (concentration ≥ 80 %)	50 t	2372-21-6	
156. Dibenzyl peroxydicarbonate (concentration ≥ 90 %)	50 t	2144-45-8	
157. 2,2-Bis (tert-butylperoxy) butane (concentration ≥ 70 %)	50 t	2167-23-9	
158. 1,1-Bis (tert-butylperoxy) cyclohexane (concentration ≥ 80 %)	50 t	3006-86-8	
159. Di-sec-butyl peroxydicarbonate (concentration ≥ 80 %)	50 t	19910-65-7	
160. 2,2-Dihydroperoxypropane (concentration ≥ 30 %)	50 t	2614-76-8	
161. Di-n-propyl peroxydicarbonate (concentration ≥ 80 %)	50 t	16066-38-9	
162. 3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetroxacyclononane (concentration ≥ 75 %)	50 t	22397-33-7	
163. Methyl ethyl ketone peroxide (concentration ≥ 60 %)	50 t	1338-23-4	
164. Methyl isobutyl ketone peroxide (concentration ≥ 60 %)	50 t	37206-20-5	
165. Peracetic acid (concentration ≥ 60 %)	50 t	79-21-0	607-094-00-8
166. Lead azide	50 t	13424-46-9	082-003-00-7
167. Lead 2,4,6-trinitroresorcinoxide (Lead styphnate)	50 t	15245-44-0	609-019-00-4
168. Mercury fulminate	10 t	20820-45-5 628-86-4	080-005-00-2
169. Cyclotetramethylenetetranitramine	50 t	2691-41-0	
170. 2,2′,4,4′,6,6′-Hexanitrostilbene	50 t	20062-22-0	
171. 1,3,5-Triamino-2,4,6-trinitrobenzene	50 t	3058-38-6	
172. Ethylene glycol dinitrate	10 t	628-96-6	603-032-00-9
173. Ethyl nitrate	50 t	625-58-1	007-007-00-8
174. Sodium picramate	50 t	831-52-7	
175. Barium azide	50 t	18810-58-7	
176. Di-isobutyryl peroxide (concentration ≥ 50 %)	50 t	3437-84-1	
177. Diethyl peroxydicarbonate (concentration ≥ 30 %)	50 t	14666-78-5	
178. tert-Butyl peroxypivalate (concentration ≥ 77 %)	50 t	927-07-1	

(1) Where this substance is in a state which gives it properties capable of creating a major-accident hazard.

NB: The EEC numbers correspond to those in Directive 67/548/EEC and its amendments.

ANNEX IV

INDICATIVE CRITERIA

(a) **Very toxic substances:**

— substances which correspond to the first line of the table below,

— substances which correspond to the second line of the table below and which, owing to their physical and chemical properties, are capable of entailing major-accident hazards similar to those caused by the substance mentioned in the first line:

	LD 50 (oral) (1) mg/kg body weight	LD 50 (cutaneous) (2) mg/kg body weight	LC 50 (3) mg/l (inhalation)
1	LD 50 ≤ 5	LD 50 ≤ 10	LC 50 ≤ 0·1
2	5 < LD 50 ≤ 25	10 < LD 50 ≤ 50	0·1 < LC 50 ≤ 0·5

(1) LD 50 oral in rats.
(2) LD 50 cutaneous in rats or rabbits.
(3) LC 50 by inhalation (four hours) in rats.

(b) **Other toxic substances:**

The substances showing the following values of acute toxicity and having physical and chemical properties capable of entailing major-accident hazards:

LD 50 (oral) (1) mg/kg body weight	LD 50 (cutaneous) (2) mg/kg body weight	LC 50 (3) mg/l (inhalation)
25 < LD 50 ≤ 200	50 < LD 50 ≤ 400	0·5 < LC 50 ≤ 2

(1) LD 50 oral in rats.
(2) LD 50 cutaneous in rats or rabbits.
(3) LC 50 by inhalation (four hours) in rats.

(c) **Flammable substances**

(i) *flammable gases:*

substances which in the gaseous state at normal pressure and mixed with air become flammable and the boiling point of which at normal pressure is 20 °C or below;

(ii) *highly flammable liquids:*

substances which have a flash point lower than 21 °C and the boiling point of which at normal pressure is above 20 °C;

(iii) *flammable liquids:*

substances which have a flash point lower than 55 °C and which remain liquid under pressure, where particular processing conditions, such as high pressure and high temperature, may create major-accident hazards.

(d) **Explosive substances:**

Substances which may explode under the effect of flame or which are more sensitive to shocks or friction than dinitrobenzene.

ANNEX V

DATA AND INFORMATION TO BE SUPPLIED IN CONNECTION WITH THE NOTIFICATION PROVIDED FOR IN ARTICLE 5

If it is not possible or if it seems unnecessary to provide the following information, reasons must be given.

1. IDENTITY OF THE SUBSTANCE

Chemical name

CAS number
Name according to the IUFAC nomenclature
Other names

Empirical formula

Composition of the substance

-Degree of purity
Main impurities and relative percentages

Detection and determination methods available to the installation

Description of the methods used or references to scientific literature

Methods and precautions laid down by the manufacturer in connection with handling, storage and fire

Emergency measures laid down by the manufacturer in the event of accidental dispersion

Methods available to the manufacturer for rendering the substance harmless

2. BRIEF INDICATION OF HAZARDS

— For man: — immediate .....
— delayed .....

— For the environment: — immediate .....
— delayed .....

ANNEX VI

INFORMATION TO BE SUPPLIED TO THE COMMISSION BY THE MEMBER STATES PURSUANT TO ARTICLE 11

REPORT OF MAJOR ACCIDENT

Member State:

Authority responsible for report:

Address:

1. **General data**

   Date and time of the major accident:

   Country, administrative region, etc.:

   Address:

   Type of industrial activity:

2. **Type of major accident**

   Explosion ☐ Fire ☐ Emission of dangerous substances ☐

   Substance(s) emitted:

3. **Description of the circumstances of the major accident**

4. **Emergency measures taken**

5. **Cause(s) of major accident**

   Known:
   (to be specified) ☐

   Not known: ☐

   Information will be supplied as soon as possible ☐

6. **Nature and extent of damage**

   (a) *Within the establishment*

   — casualties ..... killed
   ..... injured
   ..... poisoned

   — persons exposed to the major accident .....

   — material damage ☐

   — the danger is still present ☐

   — the danger no longer exists ☐

   (b) *Outside the establishment*

   — casualties ..... killed
   ..... injured
   ..... poisoned

   — persons exposed to the major accident .....

— material damage ☐

— damage to the environment ☐

— the danger is still present ☐

— the danger no longer exists ☐

7. **Medium and long-term measures,** particularly those aimed at preventing the recurrence of similar major accidents (to be submitted as the information becomes available).

ANNEX VII

STATEMENT RE ARTICLE 8

The Member States shall consult one another in the framework of their bilateral relations on the measures required to avert major accidents originating in a notified industrial activity within the meaning of Article 5 and to limit the consequences for man and the environment. In the case of new installations, this consultation shall take place within the time limits laid down in Article 5 (2).
