

## **Schedule 1**

Regulations 3(1) and (3) and 4(1)

### **APPLICATION OF THE DIRECTIVE**

#### **Annex I to Council Directive 96/82/EC as amended by Council Directive 2003/105/EC**

#### **INTRODUCTION**

1. This Annex applies to the presence of dangerous substances at any establishment within the meaning of Article 3 of this Directive and determines the application of the relevant Articles thereof.
2. Mixtures and preparations shall be treated in the same way as pure substances provided they remain within concentration limits set according to their properties under the relevant Directives given in Part 2, Note 1, or their latest adaptation to technical progress, unless a percentage composition or other description is specifically given.
3. The qualifying quantities set out below relate to each establishment.
4. The quantities to be considered for the application of the relevant Articles are the maximum quantities which are present or are likely to be present at any one time. Dangerous substances present at an establishment only in quantities equal to or less than 2 % of the relevant qualifying quantity shall be ignored for the purposes of calculating the total quantity present if their location within an establishment is such that it cannot act as an initiator of a major accident elsewhere on the site.
5. The rules given in Part 2, Note 4 governing the addition of dangerous substances, or categories of dangerous substances, shall apply where appropriate.
6. For the purposes of this Directive, a gas is any substance that has an absolute vapour pressure equal to or greater than 101.3 kPa at a temperature of 20° C.

7. For the purposes of this Directive, a liquid is any substance that is not defined as a gas and that is not in the solid state at a temperature of 20° C and at a standard pressure of 101.3 kPa.

**PART 1**  
**Named substances**

Where a substance or group of substances listed in Part 1 also falls within a category of Part 2, the qualifying quantities set out in Part 1 must be used.

Column 1	Column 2	Column 3
Dangerous substances	Qualifying quantity (tonnes) for the application of	
	Articles 6 and 7	Article 9
Ammonium nitrate (see note 1)	5000	10000
Ammonium nitrate (see note 2)	1250	5000
Ammonium nitrate (see note 3)	350	2500
Ammonium nitrate (see note 4)	10	50
Potassium nitrate (see note 5)	5000	10000
Potassium nitrate (see note 6)	1250	5000
Arsenic pentoxide, arsenic (V) acid and/or salts	1	2
Arsenic trioxide, arsenious (III) acid and/or salts		0.1
Bromine	20	100
Chlorine	10	25

Nickel compounds in inhalable powder form (nickel monoxide, nickel dioxide, nickel sulphide, trinickel disulphide, dinickel trioxide)		1
Ethyleneimine	10	20
Fluorine	10	20
Formaldehyde (concentration $\geq 90\%$ )	5	50
Hydrogen	5	50
Hydrogen chloride (liquefied gas)	25	250
Lead alkyls	5	50
Liquefied extremely flammable gases (including LPG) and natural gas	50	200
Acetylene	5	50
Ethylene oxide	5	50
Propylene oxide	5	50
Methanol	500	5000
4, 4-Methylenebis (2-chloraniline) and/or salts, in powder form		0.01
Methylisocyanate		0.15
Oxygen	200	2000
Toluene diisocyanate	10	100
Carbonyl dichloride (phosgene)	0.3	0.75
Arsenic trihydride (arsine)	0.2	1
Phosphorus trihydride (phosphine)	0.2	1
Sulphur dichloride	1	1
Sulphur trioxide	15	75

Polychlorodibenzofurans and polychlorodibenzodioxins (including TCDD), calculated in TCDD equivalent		0.001
The following CARCINOGENS at concentrations above 5% by weight:	0.5	2
4-Aminobiphenyl and/or its salts, Benzotrichloride, Benzidine and/or salts, Bis (chloromethyl) ether, Chloromethyl methyl ether, 1,2-Dibromoethane, Diethyl sulphate, Dimethyl sulphate, Dimethylcarbamoyl chloride, 1,2-Dibromo-3-chloropropane, 1,2-Dimethylhydrazine, Dimethylnitrosamine, Hexamethylphosphoric triamide, Hydrazine, 2-Naphthylamine and/or salts, 4-Nitrodiphenyl, and 1,3 Propanesultone		
Petroleum products:	2500	25000
(a) Gasolines and naphthas, (b) Kerosenes (including jet fuels) (c) Gas oils (including diesel fuels, home heating oils and gas oil blending streams)		

#### NOTES

1. Ammonium nitrate (5000/10000): fertilisers capable of self-sustaining decomposition

This applies to ammonium nitrate-based compound/composite fertilisers (compound/composite fertilisers containing ammonium nitrate with phosphate and/or potash) in which the nitrogen content as a result of ammonium nitrate is—

- between 15,75% <sup>(1)</sup> and 24,5% <sup>(2)</sup> by weight, and either with not more than 0.4% total combustible/organic materials or which fulfil the requirements of Annex II of Directive 80/876/EEC,

- 15,75% <sup>(3)</sup> by weight or less and unrestricted combustible materials,

and which are capable of self-sustaining decomposition according to the UN Trough Test (see United Nations Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria, Part III, subsection 38.2).

## 2. Ammonium nitrate (1250/5000): fertiliser grade

This applies to straight ammonium nitrate-based fertilisers and to ammonium nitrate-based compound/composite fertilisers in which the nitrogen content as a result of ammonium nitrate is

- more than 24,5% by weight, except for mixtures of ammonium nitrate with dolomite, limestone and/or calcium carbonate with a purity of at least 90%,
- more than 15,75% by weight for mixtures of ammonium nitrate and ammonium sulphate,
- more than 28%<sup>(4)</sup> by weight for mixtures of ammonium nitrate with dolomite, limestone and/or calcium carbonate with a purity of at least 90%,

and which fulfil the requirements of Annex II of Directive 80/876/EEC

## 3. Ammonium nitrate (350/2500): technical grade

This applies to:

- ammonium nitrate and preparations of ammonium nitrate in which the nitrogen content as a result of the ammonium nitrate is
- between 24.5% and 28% by weight, and which contain not more than 0.4% combustible substances,
- more than 28% by weight, and which contain not more than 0.2% combustible substances
- aqueous ammonium nitrate solutions in which the concentration of ammonium nitrate is more than 80% by weight.

## 4. Ammonium nitrate (10/50): “off-specs” material and fertilisers not fulfilling the detonation test

This applies to:

- material rejected during the manufacturing process and to ammonium nitrate and preparations of ammonium nitrate, straight ammonium nitrate-based fertilisers and ammonium nitrate-based compound/composite fertilisers referred to in notes 2 and 3, that are being or have been returned from the final user to a manufacturer, temporary storage or reprocessing plant for reworking, recycling or treatment for safe use, because they no longer comply with the specifications of Notes 2 and 3:

- fertilisers referred to in Note 1, first indent, and Note 2 which do not fulfil the requirements of Annex II of Directive 80/876/EEC.

5. Potassium nitrate (5 000/10 000): composite potassium-nitrate based fertilisers composed of potassium nitrate in prilled/granular form.

6. Potassium nitrate (1 250/5 000): composite potassium-nitrate based fertilisers composed of potassium nitrate in crystalline form.

7. Polychlorodibenzofurans and polychlorodibenzodioxins

The quantities of polychlorodibenzofurans and polychlorodibenzodioxins are calculated using the following factors:

Intentional Toxic Equivalent Factors (ITEF) for the congeners of concern (NATO/CCMS)			
2,3,7,8-TCDD	1	2,3,7,8-TCDF	0.1
1,2,3,7,8-PeDD	0.5	2,3,4,7,8-PeCDF	0.5
		1,2,3,7,8-PeCDF	0.05
1,2,3,4,7,8-HxCDD	0.1		
1,2,3,6,7,8-HxCDD	0.1	1,2,3,4,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDD	0.1	1,2,3,7,8,9-HxCDF	0.1
		1,2,3,6,7,8-HxCDF	0.1
1,2,3,4,6,7,8-HpCDD	0.01	2,3,4,6,7,8-HxCDF	0.1
OCDD	0.001	1,2,3,4,6,7,8-HpCDF	0.01
		1,2,3,4,7,8,9-HpCDF	0.01
		OCDF	0.001

(T = tetra, P = penta, Hx = hexa, HP = hepta, O = octa)

(1) 15,75% nitrogen content by weight as a result of ammonium nitrate corresponds to 45% ammonium nitrate

(2) 24.5% nitrogen content by weight as a result of ammonium nitrate corresponds to 70% ammonium nitrate

(3) 15.75% nitrogen content by weight as a result of ammonium nitrate corresponds to 45% ammonium nitrate.

(4) 28% nitrogen content by weight as a result of ammonium nitrate corresponds to 80% ammonium nitrate.

**PART 2**

**Categories of substances and preparations not specifically named in Part 1**

Column 1	Column 2	Column 3
Categories of dangerous substances	Qualifying quantity (tonnes) of dangerous substances as delivered in Article 3 (4), for the application of	
	Articles 6 and 7	Article 9
1. VERY TOXIC	5	20
2. TOXIC	50	200
3. OXIDIZING	50	200
4. EXPLOSIVE (see Note 2) where the substance, preparation or article falls under UN/ADR Division 1.4	50	200
5. EXPLOSIVE (see Note 2) where the substance, preparation or article falls under any of: UN/ADR Divisions 1.1, 1.2, 1.3, 1.5 or 1.6 or risk phrase R2 or R3	10	50
6. FLAMMABLE (where the substance or preparation falls within the definition given in Note 3(a))	5000	50000
7 a. HIGHLY FLAMMABLE (where the substance or preparation falls within the definition given in Note 3(b)(1))	50	200
7 b. HIGHLY FLAMMABLE liquids (where the substance or preparation falls within the definition given in Note 3(b)(2))	5000	50000
8. EXTREMELY FLAMMABLE (where the substance or preparation falls within the definition given in Note 3(c))	10	50

9. DANGEROUS FOR THE ENVIRONMENT risk phrases:		
(i) R50: “Very toxic to aquatic organisms” (including R50/53)	100	200
(ii) R51/53: “Toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment”	200	500
10. ANY CLASSIFICATION not covered by those given above in combination with risk phrases:		
(i) R14: “Reacts violently with water” (including R14/15)	100	500
(ii) R29: “in contact with water, liberates toxic gas”	50	200

#### NOTES

1. Substances and preparations are classified according to the following Directives (as amended) and their current adaptation to technical progress:

- Council Directive 67/548/EEC of 27 June 1967 on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (<sup>1</sup>),

- Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations (<sup>2</sup>)

In the case of substances and preparations which are not classified as dangerous according to either of the above Directives, for example waste, but which nevertheless are present, or are likely to be present, in an establishment and which possess or are likely to possess, under the conditions found at the establishment, equivalent properties in terms of major-accident potential, the procedures for provisional classification shall be followed in accordance to the relevant article of the appropriate Directive.

In the case of substances and preparations with properties giving rise to more than one classification, for the purposes of this Directive the lowest qualifying quantities shall apply. However, for the application of the rule in Note 4, the qualifying quantity used shall always be the one corresponding to the classification concerned.



For the purposes of this Directive, the Commission shall establish and keep up to date a list of substances which have been classified in the above categories by a harmonised Decision in accordance with Directive 67/548/EEC.

2. An 'explosive' means:

- a substance or preparation which creates the risk of an explosion by shock, friction, fire or other sources of ignition (risk phrase R 2),
- a substance or preparation which creates extreme risks of explosion by shock, friction, fire or other sources of ignition (risk phrase R 3), or
- a substance, preparation or article covered by Class 1 of the European Agreement concerning the International Carriage of Dangerous Goods by Road (UN/ADR), concluded on 30 September 1957, as amended, as transposed by Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road <sup>(3)</sup>.

Included in this definition are pyrotechnics, which for the purposes of this Directive are defined as substances (or mixtures of substances) designated to produce heat, light, sound, gas or smoke or a combination of such effects through self-sustained exothermic chemical reactions. Where a substance or preparation is classified by both UN/ADR and risk phase R2 or R3, the UN/ADR classification shall take precedence over assignment of risk phrases.

Substances and articles of Class 1 are classified in any of the divisions 1.1 to 1.6 in accordance with the UN/ADR classification scheme. The divisions concerned are:

Division 1.1: Substances and articles which have a mass explosion hazard (a mass explosion is an explosion which affects almost the entire load virtually instantaneously).

Division 1.2: Substances and articles which have a projection hazard but not a mass explosion hazard.

Division 1.3: Substances and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard:

- (a) combustion of which gives rise to considerable radiant heat: or
- (b) which burns one after another, producing minor blast or projection effects or both.

Division 1.4: Substances and articles which present only a slight risk in the event of ignition or initiation during carriage. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of virtually the entire contents of the package.

Division 1.5: Very insensitive substances having a mass explosion hazard which are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of carriage. As a minimum requirement they shall not explode in the external fire test.

Division 1.6: Extremely insensitive articles which do not have a mass explosion hazard. The articles contain only extremely insensitive detonating substances and demonstrate a negligible probability of accidental initiation or propagation. The risk is limited to the explosion of a single article.

Included in this definition are also explosive or pyrotechnic substances or preparations contained in articles. In the case of articles containing explosive or pyrotechnic substances or preparations, if the quantity of the substance or preparation contained is known, that quantity shall be considered for the purposes of this Directive. If the quantity is not known, then, for the purposes of this Directive, the whole article shall be treated as explosive.

3. Flammable, highly flammable, and extremely flammable in categories 6, 7 and 8 mean:

(a) flammable liquids:

- substances and preparations having a flash point equal to or greater than 21 °C and less than or equal to 55°C (risk phrase R 10), supporting combustion;

(b) highly flammable liquids:

1. - substances and preparations which may become hot and finally catch fire in contact with air at ambient temperature without any input of energy (risk phrase R 17),

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

2. substances and preparations having a flash point lower than 21 °C and which are not extremely flammable (risk phrase R 11, second indent);

(c) extremely flammable gases and liquids:

1. liquid substances and preparations which have a flash point lower than 0°C and the boiling point (or, in the case of a boiling range, the initial boiling point) of which at normal

pressure is less than or equal to 35 °C (risk phrase R 12, first indent), and

2. gases which are flammable in contact with air at ambient temperature and pressure (risk phrase R 12, second indent), which are in a gaseous or supercritical state, and
3. flammable and highly flammable liquid substances and preparations maintained at a temperature above their boiling point.

4. In the case of an establishment where no individual substance or preparation is present in a quantity above or equal to the relevant qualifying quantities, the following rule shall be applied to determine whether the establishment is covered by the relevant requirements of the Directive.

This Directive shall apply if the sum -

$q_1 / Q_{U1} + q_2 / Q_{U2} + q_3 / Q_{U3} + q_4 / Q_{U4} + q_5 / Q_{U5} + \dots$  is greater than or equal to 1,

where  $q_x$  = the quantity of dangerous substance x (or category of dangerous substances) falling within Parts 1 or 2 of this Annex,

and  $Q_{UX}$  = the relevant qualifying quantity for substance or category x from column 3 of Parts 1 or 2

This Directive shall apply, with the exception of Articles 9, 11 and 13, if the sum

$q_1 / Q_{L1} + q_2 / Q_{L2} + q_3 / Q_{L3} + q_4 / Q_{L4} + q_5 / Q_{L5} + \dots$  is greater than or equal to 1,

where  $q_x$  = the quantity of dangerous substance x (or category of dangerous substances) falling within Parts 1 or 2 of this Annex,

and  $Q_{LX}$  = the relevant qualifying quantity for substance or category x from column 2 of Parts 1 or 2.

This rule shall be used to assess the overall hazards associated with toxicity, flammability, and eco-toxicity. It must therefore be applied three times:

- (a) for the addition of substances and preparations named in Part 1 and classified as toxic or very toxic, together with substances and preparations falling into categories 1 or 2;
- (b) for the addition of substances and preparations named in Part 1 and classified as oxidising, explosive, flammable, highly flammable, or extremely flammable, together with substances and preparations falling into categories 3, 4, 5, 6, 7a, 7b or 8;
- (c) for the addition of substances and preparations named in Part 1 and classified as dangerous for the environment (R50 (including R50/53) or R51/53), together with substances and preparations falling into categories 9(i) or 9(ii);

The relevant provisions of this Directive apply if any of the sums obtained by (a),(b) or (c) is greater than or equal to 1.

<sup>(1)</sup>O.J. L 196, 16.8.1967, p.1. Directive as last amended by Regulation (EC) No 807/2003 (O.J. L 122, 16.5.2003, p.36).

<sup>(2)</sup>O.J. L 200, 30.7.1999, p.1. Directive as amended by Commission Directive 2001/60/EC (O.J. L 226, 22.8.2001, p.5).

<sup>(3)</sup>O.J. L 319, 12.12.1994, p.7. Directive as last amended by Commission Directive 2003/28/EC (O.J. L 90, 8.4.2003, p.45).