# DANGEROUS SUBSTANCES TO WHICH THE REGULATIONS APPLY (This Schedule sets out the provisions of Annex I of the Directive) 

## PART 1

## INTRODUCTION

1. This Schedule applies to the presence of dangerous substances at any establishment and determines the application of the relevant regulations in accordance with regulation 3(1).
2. Mixtures and preparations shall be treated in the same way as pure substances provided they remain within the concentration limits set according to their properties under the relevant provisions specified in Part 3, Note 1, unless a percentage composition or other description is specifically given.
3. The qualifying quantities set out in Parts 2 and 3 relate to each establishment.
4. The quantities to be considered for the application of the relevant regulations are the maximum quantities which are present at any one time. Dangerous substances present at an establishment only in quantities equal to or less than 2 per cent 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 site.
5. The rules given in Part 3, Note 4 governing the addition of dangerous substances, or categories of dangerous substances, shall apply where appropriate.

## PART 2

## Named Substances

Where a substance or group of substances listed in this Part also falls within a category of Part 3, the qualifying quantities set out in this Part must be used.

| Column 1 <br> Dangerous substances | Column 2 <br> Quantity in tonnes | Column 3 |
| :--- | :--- | :--- |
| Ammonium nitrate (as <br> described in Note 1 of this <br> Part) | 350 | 2,500 |
| Ammonium nitrate (as <br> described in Note 2 of this <br> Part) | 1,250 | 5,000 |
| Arsenic pentoxide, arsenic (V) <br> acid and/or salts | 1 | 2 |
| Arsenic trioxide, arsenious <br> (III) acid and/or salts | 0.1 | 0.1 |
| Bromine | 20 | 100 |
| Chlorine | 10 | 25 |
| Nickel compounds in <br> inhalable powder form (nickel | 1 | 1 |


| Column 1 <br> Dangerous substances | Column 2 <br> Quantity in tonnes | Column 3 |
| :---: | :---: | :---: |
| monoxide, nickel dioxide, nickel sulphide, trinickel disulphide, dinickel trioxide) |  |  |
| Ethyleneimine | 10 | 20 |
| Fluorine | 10 | 20 |
| Formaldehyde (concentration =>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 (whether liquefied or not) | 50 | 200 |
| Acetylene | 5 | 50 |
| Ethylene oxide | 5 | 50 |
| Propylene oxide | 5 | 50 |
| Methanol | 500 | 5,000 |
| 4, 4-Methylenebis (2chloraniline) and/or salts, in powder form | 0.01 | 0.01 |
| Methylisocyanate | 0.15 | 0.15 |
| Oxygen | 200 | 2,000 |
| 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 | 0.001 |
| The following CARCINOGENS: |  |  |


| Column 1 <br> Dangerous substances | Column 2 <br> Quantity in tonnes | Column 3 |
| :--- | :--- | :--- |
| 4-Aminobiphenyl and/or <br> its salts, Benzidine and/or <br> salts, Bis(chloromethyl) <br> ether, Chloromethyl methyl <br> ether, Dimethylcarbamoyl <br> chloride, Dimethylnitrosomine, | 0.001 | 0.001 |
| Hexamethylphosphoric <br> triamide, 2-Naphthylamine <br> and/or salts, 1,3 |  |  |
| Propanesultone and 4- <br> nitrodiphenyl | 50,000 |  |
| Automotive petrol and other <br> petroleum spirits | 5,000 |  |

## Notes

## Ammonium nitrate (350/2500)

1. This applies to ammonium nitrate and ammonium nitrate compounds in which the nitrogen content as a result of the ammonium nitrate is more than 28 per cent by weight (compounds other than those referred to in Note 2) and to aqueous ammonium nitrate solutions in which the concentration of ammonium nitrate is more than 90 per cent by weight.

## Ammonium nitrate (1250/5000)

2. This applies to simple ammonium-nitrate based fertilisers which conform with the requirements of the Fertilisers Regulations 1991(1), and to composite fertilisers in which the nitrogen content as a result of the ammonium nitrate is more than 28 per cent in weight (a composite fertiliser contains ammonium nitrate with phosphate or potash, or phosphate and potash).

## Polychlorodibenzofurans and polychlorodibenzodioxins

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

International Toxic Equivalent Factors (ITEF) for the congeners of concern (NATO/CCMS)

| $2,3,7,8-\mathrm{TCDD}$ | 1 |
| :--- | :--- |
| $1,2,3,7,8-\mathrm{PeDD}$ | 0.5 |
| $1,2,3,4,7,8-\mathrm{HxCDD}$ | 0.1 |
| $1,2,3,6,7,8-\mathrm{HxCDD}$ |  |
| $1,2,3,7,8,9-\mathrm{HxCDD}$ |  |
| $1,2,3,4,6,7,8-\mathrm{HpCDD}$ | 0.01 |

[^0]OCDD ..... 0.001
2, 3, 7, 8-TCDF ..... 0.1
2, 3, 4, 7, 8-PeCDF ..... 0.5
1, 2, 3, 7, 8-PeCDF ..... 0.05
1, 2, 3, 4, 7, 8-HxCDF ..... 0.1
1, 2, 3, 7, 8, 9-HxCDF1, 2, 3, 6, 7, 8-HxCDF
2, 3, 4, 6, 7, 8-HxCDF
1, 2, 3, 4, 6, 7, 8-HpCDF ..... 0.01
1, 2, 3, 4, 7, 8, 9-HpCDFOCDF0.001
( $\mathrm{T}=$ tetra, $\mathrm{Pe}=$ penta, $\mathrm{Hx}=$ hexa, $\mathrm{Hp}=$ hepta, $\mathrm{O}=$ octa )
PART 3
Categories of Substances and Preparations not specifically named in Part 2

| Column 1 <br> Categories of dangerous substances | Column 2 <br> Quantity in tonnes | Column 3 |
| :---: | :---: | :---: |
| 1. VERY TOXIC | 5 | 20 |
| 2. TOXIC | 50 | 200 |
| 3. OXIDISING | 50 | 200 |
| 4. EXPLOSIVE (where the substance or preparation falls within the definition given in Note 2(a)) | 50 | 200 |
| 5. EXPLOSIVE (where the substance or preparation falls within the definition given in Note 2(b)) | 10 | 50 |
| 6. FLAMMABLE (where the substance or preparation falls within the definition given in Note 3(a)) | 5,000 | 50,000 |
| 7a. HIGHLY FLAMMABLE (where the substance or preparation falls | 50 | 200 |



## Notes

1. Substances and preparations shall be classified for the purposes of this Schedule according to regulation 5 of the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994(2) whether or not the substance or preparation is required to be classified for the purposes of those
[^1]Regulations, or, in the case of a pesticide approved under the Food and Environment Protection Act 1985(3), in accordance with the classification assigned to it by that approval.

In the case of substances and preparations with properties giving rise to more than one classification, for the purposes of these Regulations the lowest thresholds shall apply.
2. An "explosive" means:
(a) (i) a substance or preparation which creates the risk of an explosion by shock, friction, fire or other sources of ignition (risk phrase R 2),
(ii) a pyrotechnic substance is a substance (or mixture of substances) designed to produce heat, light, sound, gas or smoke or a combination of such effects through non-detonating self-sustained exothermic chemical reactions, or
(iii) an explosive or pyrotechnic substance or preparation contained in objects;
(b) a substance or preparation which creates extreme risks of explosion by shock, friction, fire or other sources of ignition (risk phrase R 3).
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 $21^{\circ} \mathrm{C}$ and less than or equal to $55^{\circ} \mathrm{C}$ (risk phrase R 10 ), supporting combustion;
(b) highly flammable liquids-
(i) - 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 which have a flash point lower than $55^{\circ} \mathrm{C}$ and which remain liquid under pressure, where particular processing conditions, such as high pressure or high temperature, may create major accident hazards;
(ii) substances and preparations having a flash point lower than $21^{\circ} \mathrm{C}$ and which are not extremely flammable (risk phrase R 11, second indent);
(c) extremely flammable gases and liquids-
(i) liquid substances and preparations which have a flash point lower than $0^{\circ} \mathrm{C}$ 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 $35^{\circ} \mathrm{C}$ (risk phrase R 12 , first indent), and
(ii) gaseous substances and preparations which are flammable in contact with air at ambient temperature and pressure (risk phrase R 12 , second indent), whether or not kept in the gaseous or liquid state under pressure, excluding liquefied extremely flammable gases (including liquefied petroleum gas) and natural gas referred to in Part 2, and
(iii) flammable liquid substances and preparations maintained at a temperature above their boiling point.

4. The addition of dangerous substances to determine the quantity present at an establishment shall be carried out according to the following rule:-
if the sum

$$
\mathrm{q}_{1} / \mathrm{Q}+\mathrm{q}_{2} / \mathrm{Q}+\mathrm{q}_{2} / \mathrm{Q}+\mathrm{q}_{2} / \mathrm{Q}+\mathrm{q}_{5} / \mathrm{Q}+\ldots>1
$$

where
$\mathrm{q}_{\mathrm{x}} \quad=$ the quantity of dangerous substances x (or category of dangerous substances) falling within Parts 2 or 3 of this Schedule,
$\mathrm{Q}=$ the relevant threshold quantity from Parts 2 or 3 ,
then the establishment is covered by the relevant requirements of these Regulations.
This rule will apply for the following circumstances-
(a) for substances and preparations appearing in Part 2 at quantities less than their individual qualifying quantity present with substances having the same classification from Part 3, and the addition of substances and preparations with the same classification from Part 3;
(b) for the addition of categories 1, 2 and 9 present at an establishment together;
(c) for the addition of categories $3,4,5,6,7 \mathrm{a}, 7 \mathrm{~b}$ and 8 , present at an establishment together.


[^0]:    (1) S.I.1991/2197; amended by S.I. 1995/16.

[^1]:    (2) S.I. 1994/3247

