

P.U.(A) 143/97
OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, PACKAGING AND LABELLING
OF HAZARDOUS CHEMICALS) REGULATIONS 1997

SCHEDULE I

(Regulation 2)

HAZARDOUS CHEMICALS AND PREPARATIONS

For the purpose of this Schedule, unless the context otherwise requires -

"acute health risk " means risk which may result in an effect that occurs immediately or shortly after a single exposure;

"boiling point " means the temperature of a liquid at which the vapour pressure (i.e. the pressure characteristic at any given temperature in degree Celsius of a vapour in equilibrium with its liquid form) is equal to or slightly greater than ambient atmospheric pressure;

"carcinogenic" means substances or preparations which if inhaled or ingested or penetrated into the skin, may induce cancer in humans or increase its incidence;

"chronic health risk" means risk which may result in a harmful effect that occurs after repeated or prolonged exposure;

"exothermic reaction" means a chemical reaction which results in the production of heat energy;

"flash point" in relation to extremely flammable, highly flammable and flammable chemicals, means the lowest temperature in degree Celsius at which liquid will produce enough vapour to ignite;

"hazardous preparation" means any preparation which possesses any of the properties categorised in Parts A and B of Schedule I, or for which relevant information exists to indicate that the preparation is hazardous;

"LC-50" means a concentration of a chemical in air which is estimated to produce death in 50% of an experimental animal population on inhalation for a short period of time;

"LD-50" means a dose of a chemical applied either through ingestion, injection or application to the skin which produces death in 50% of an experimental animal population;

"mutagenic" means. substances or preparations which if inhaled or ingested or penetrated into the skin may induce genetic changes in spermatozoa or ovum cells or increase its incidence;

"teratogenic" means substances or preparations which if inhaled or ingested or penetrated into the skin of a pregnant woman, may induce deformation in the foetus or increase its incidence.

The following chemicals and preparations are hazardous within the meaning of these Regulations:

Part A: Classification based on physicochemical properties

- | | |
|-------------------------|--|
| (a) Explosive | -chemicals and preparations which may explode under the effect of flame which are more sensitive to shocks or friction than dinitrobenzene |
| (b) Oxising | -chemicals and preparations which give rise to highly exothermic reaction when contact with other chemicals, particularly flammable chemicals |
| (c) Extremely flammable | -liquid chemicals and preparations having a flash point lower than 0 degree Celsius and a boiling point lower than or equal to 35 degree Celsius |
| (d) Highly flammable | <p>-(i) chemicals and preparations which may become hot and finally catch fire when in contact with air at ambient temperature without any application of energy;</p> <p>-(ii) solid substances and preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or be consumed after removal of the source of ignition;</p> <p>-(iii) liquid substances and preparations having a flash point below 21 degrees Celsius;</p> <p>-(iv) gaseous substances and preparations which are flammable in air at normal pressure; or</p> <p>-(v) substances and preparations which, when in contact with water or damp air, evolve highly flammable gases in dangerous quantities</p> |
| (e) Flammable | liquid substances and preparations having a flash point equal to or greater than 21 degrees Celsius and less than or equal to 55 degrees Celsius. |

Part B: Classification based on health effect

- | | |
|----------------|--|
| (a) Very toxic | <p>-(i) substances and preparations which if inhaled or ingested or penetrated into the skin may involve extremely serious, acute or chronic health risks or even death; or</p> <p>-(ii) substances and preparations for which the LD- 50 absorbed orally in rat is less than 25 mg/kg or the LD-50 percutaneous absorption in rat or rabbit is less than 50 mg/kg or the LC-50 absorbed by inhalation in rat is less than 0.5 mg/litre (administered for a minimum period of four hours)</p> |
| (b) Toxic- | <p>-(i) substances and preparations which if inhaled or ingested or penetrated into the skin may involve serious, acute or chronic health risks or even death;</p> <p>-(ii) substances and preparations for which the LD- 50 absorbed orally in rat is between 25 to 200 mg/ kg or the LD-50 percutaneous absorption in rat or rabbit is between 50 to 400 mg/kg or the LC-50 absorbed by inhalation in rat is between 0.5 to 2 mg/litre (administered for a minimum period of four hours); or</p> <p>-(iii) substances and preparations which are defined as carcinogenic, teratogenic or mutagenic</p> |
| (c) Harmful- | -(i) substances and preparations which if inhaled or ingested or penetrated |

into the skin may involve limited health risks; or

(ii) substances and preparations for which the LD-50 absorbed orally in rat is between 200 to 500 mg/kg or the LD-50 percutaneous absorption in rat or rabbit is between 400 to 2000 mg/kg or the LC-50 absorbed by inhalation in rat is between 2 to 20 mg/litre (administered for a minimum period of four hours)

(d) Corrosive-

-substances and preparations which may, on contact with living tissues, destroy them.

(e) Irritant-

-non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation