### SCHEDULE 1

Regulation 2(1)

#### CHARACTERISTIC PROPERTIES OF DANGEROUS SUBSTANCES

# PART I

## categories of danger and characteristic properties

Column 1	Column 2		
Category of danger	Property		
PHYSICO-CHEMICAL PROPERTIES			
Explosive	Solid, liquid, pasty or gelatinous substances which may also react exothermically without atmospheric oxygen thereby quickly evolving gases, and which under defined test conditions detonate, quickly deflagrate or upon heating explode when partially confined.		
Oxidizing	Substances which give rise to a highly exothermic reaction in contact with other substances, particularly flammable substances.		
Extremely flammable	Liquid substances having an extremely low flash point and a low boiling point and gaseous substances and preparations which are flammable in contact with air at ambient temperature and pressure.		
Highly flammable	<ul> <li>(a) substances which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy,</li> <li>(b) solid substances which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition,</li> <li>(c) liquid substances having a very low flash point, or</li> <li>(d) substances which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities.</li> </ul>		
Flammable	Liquid substances having a low flash point.		
HEALTH EFFECTS			
Very toxic	Substances which in very low quantities cause death or acute or chronic damage to health when inhaled, swallowed or absorbed via the skin.		

Column 1 Category of danger	Column 2 Property	
Toxic	Substances which in low quantities cause death or acute or chronic damage to health when inhaled, swallowed or absorbed via the skin.	
Harmful	Substances which may cause death or acute or chronic damage to health when inhaled, swallowed or absorbed via the skin.	
Corrosive	Substances which may, on contact with living tissues, destroy them.	
Irritant	Non-corrosive substances which, through immediate, prolonged or repeated contact with the skin or mucous membrane, may cause inflammation.	
Sensitizing	Substances which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance, characteristic effects are produced.	
Carcinogenic	Substances which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence.	
Mutagenic	Substances which, if they are inhaled or ingested or if they penetrate the skin, may induce heritable genetic defects or increase their incidence.	
Toxic for reproduction	Substances which, if they are inhaled or ingested or if they penetrate the skin, may produce or increase the incidence of, non-heritable adverse effects in the progeny or the impairment of male or female reproductive functions or capacity.	
ENVIRONMENT		
Dangerous for the environment	Substances which, were they to enter into the environment would present or may present an immediate or delayed danger for one or more compartments of the environment.	

### PART II

criteria for the categories of danger "very toxic", "toxic" and "harmful" Substances shall be classified as "very toxic", "toxic" or "harmful" in accordance with the following criteria:

(a) Where the acute toxicity in animals of the commercial substance has been determined by a method which permits estimation of the LD50 or LC50, classification as very toxic, toxic or harmful shall be effected using the following parameters as reference values:

Category of danger	LD <sub>50</sub> Oral in rat mg/kg body weight	LD <sub>50</sub> Dermal in rat or rabbit mg/kg body weight	LC <sub>50</sub> Inhalation in rat mg/litre/4 hrs	
			gases and vapours	aerosols and particulates
Very toxic	≤25	≤50	≤0.5	≤0.25
Toxic	>25 to 200	>50 to 400	>0.5 to 2	>0.25 to 1
Harmful	>200 to 2000	>400 to 2000	>2 to 10	>1 to 5

(b) Where the acute oral toxicity in animals of the commercial substance has been determined using the fixed dose procedure, classification as very toxic, toxic or harmful shall be effected on the basis of the discriminating dose. This is the dose level which produces evident toxicity, but no mortality, and is one of four fixed dose levels (5, 50, 500 or 2000 mg/kg bodyweight). "Evident toxicity" is a term used to describe signs of toxicity following administration of a test substance, which are of a severity such that administration of the next higher fixed dose level would be expected to result in mortality. As this test method is based on the selection of doses from a series of fixed doses, it is inappropriate to give values for classification. The following parameters are used as reference values:

Category	Discriminating dose (mg/kg bodyweight)
Very toxic	<5
Toxic	5 to <50
Harmful	50 to <500

The 2000 mg/kg dose level is used primarily to obtain information on signs of toxicity that may occur with substances which are of low acute toxicity and are not classified on the basis of acute toxicity;

(c) If facts show that for the purposes of classification it is inadvisable to use the reference values given in paragraphs (a) and (b) because the substances produce other effects, the substances shall be classified according to the magnitude of these effects.