



Correlation between GHS and New Zealand HSNO Hazard Classes and Categories

Physical Hazards

Class	GHS Category ¹	HSNO Category
Explosives	Unstable explosives	a
	Division 1.1	1.1
	Division 1.2	1.2
	Division 1.3	1.3
	Division 1.4	1.4
	Division 1.5	1.5
	Division 1.6	1.6
Flammable gases	Category 1	2.1.1A
	Category 2	2.1.1B
Flammable aerosols	Category 1	2.1.2A ^b
	Category 2	b
Oxidizing gases	Category 1	5.1.2A
Gases under pressure	Compressed gases	c
	Liquefied gas	c
	Refrigerated liquefied gas	c
	Dissolved gas	c
Flammable liquids	Category 1	3.1A
	Category 2	3.1B
	Category 3	3.1C
	Category 4	3.1D

¹ Third revised edition, 2009

Class	GHS Category¹	HSNO Category
Liquid desensitized explosives		3.2A ^d
		3.2B ^d
		3.2C ^d
Flammable solids	Category 1	4.1.1A
	Category 2	4.1.1B
Self-reactive substances and mixtures	Type A	4.1.2A
	Type B	4.1.2B
	Type C	4.1.2C
	Type D	4.1.2D
	Type E	4.1.2E
	Type F	4.1.2F
	Type G	4.1.2G
Solid desensitized explosives		4.1.3A ^d
		4.1.3B ^d
		4.1.3C ^d
Pyrophoric liquids	Category 1	4.2A
Pyrophoric solids	Category 1	4.2A
Self-heating substances and mixtures	Category 1	4.2B
	Category 2	4.2C
Substances and mixtures, which in contact with water, emit flammable gases	Category 1	4.3A
	Category 2	4.3B
	Category 3	4.3C
Oxidizing liquids	Category 1	5.1.1A
	Category 2	5.1.1B
	Category 3	5.1.1C
Oxidizing solids	Category 1	5.1.1A
	Category 2	5.1.1B
	Category 3	5.1.1C
Organic peroxides	Type A	5.2A
	Type B	5.2B

Class	GHS Category ¹	HSNO Category
	Type C	5.2C
	Type D	5.2D
	Type E	5.2E
	Type F	5.2F
	Type G	5.2G
Corrosive to metals	Category 1	8.1A

Health Hazards

Class	Category	HSNO Category
Acute toxicity: Oral	Category 1	6.1A
	Category 2	6.1B
	Category 3	6.1C
	Category 4	6.1D
	Category 5	6.1E
Acute toxicity: Skin	Category 1	6.1A
	Category 2	6.1B
	Category 3	6.1C
	Category 4	6.1D
	Category 5	6.1E
Acute toxicity: Inhalation	Category 1	6.1A
	Category 2	6.1B
	Category 3	6.1C
	Category 4	6.1D
	Category 5	6.1E
Skin corrosion/irritation	Category 1A	8.2A
	Category 1B	8.2B
	Category 1C	8.2C
	Category 2	6.3A
	Category 3	6.3B

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Serious eye damage/eye irritation	Category 1	8.3A
	Category 2A	6.4A
	Category 2B	6.4A ^e
Respiratory sensitization	Category 1	6.5A
Skin sensitization	Category 1	6.5B
Germ cell mutagenicity	Category 1A	6.6A
	Category 1B	6.6A
	Category 2	6.6B
Carcinogenicity	Category 1A	6.7A
	Category 1B	6.7A
	Category 2	6.7B
Reproductive toxicity	Category 1A	6.8A
	Category 1B	6.8A
	Category 2	6.8B
	Effects on or via lactation	6.8C
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 1	6.9A
	Category 2	6.9B
	Category 3	f
Specific Target Organ Systemic Toxicity (Repeated exposure)	Category 1	6.9A
	Category 2	6.9B
Aspiration hazard	Category 1	6.1E ^g
	Category 2	6.1E ^g

Environmental Hazards

Class	Category	HSNO Category
Aquatic toxicity (Acute)	Category 1	9.1A
	Category 2	9.1D
	Category 3	9.1D
Aquatic toxicity (Chronic)	Category 1	9.1A
	Category 2	9.1B

	Category 3	9.1C
	Category 4	9.1D
Ecotoxic to soil environment		9.2A – 9.2D
Ecotoxic to terrestrial vertebrates		9.3A – 9.3C
Ecotoxic to terrestrial invertebrates		9.4A – 9.4C
Hazardous to the ozone layer	Category 1	^h

Notes:

- ^a Not currently covered under HSNO classification scheme.
- ^b HSNO criteria taken from UN Model Regulations 11th Edition.
- ^c Covered under local transport law adoption of UN Model Regulations.
- ^d HSNO criteria taken from UN Model Regulations 11th Edition.
- ^e HSNO does not separate reversible eye effects into two sub-categories.
- ^f HSNO does not specifically address the GHS category of transient target organ effects. Narcotic effects would normally be classified under 6.9B and respiratory irritation would be classified under 6.1E.
- ^g Aspiration hazard is currently captured under HSNO as an acute toxic hazard where there is evidence in humans of significant acute toxic effects as a result of acute exposure to the substance, where the substance has not already been assigned to a more hazardous category.
- ^h Covered under the Ozone Layer Protection Act.

Further Information

EPA publishes information sheets on a range of topics to provide background information on current issue or proposals being dealt with by the EPA.

All publications may be viewed and downloaded from our website at www.epa.govt.nz or requested by contacting:

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