

Correlation between HSNO Classifications & GHS Classifications (2021 NZ Implementation)

with Pictograms – GHS pictograms & UNRTDG pictograms (UN recommendations on the transport of Dangerous Goods)

Physical Hazards		UNRTDG	GHS
Flammable Gases			
2.1.1A	flammable gas Category 1A flammable gas Category 1A pyrophoric gas flammable gas Category 1A chemically unstable gas A flammable gas Category 1A chemically unstable gas B flammable gas Category 1B		
2.1.1B	flammable gas Category 2	Not required	No pictogram
Aerosols			
2.1.2A	aerosol Category 1 aerosol Category 2		
	aerosol Category 3		No pictogram
Gases under pressure			
	Compressed gas Liquefied gas Refrigerated liquefied gas Dissolved gas	Depends on other properties	
		UNRTDG 2.1 2.2 2.3 5.1	
Flammable Liquids			
3.1A	flammable liquids Category 1		
3.1B	flammable liquids Category 2		
3.1C	flammable liquids Category 3		
3.1D	flammable liquids Category 4	Not required	No pictogram

Flammable solids			
4.1.1A	flammable solids Category 1		
4.1.1B	flammable solids Category 2		
Self-reactive substances and mixtures			
4.1.2A	self-reactive substances and mixtures Type A	May not be able to be transported	
4.1.2B	self-reactive substances and mixtures Type B		
4.1.2C	self-reactive substances and mixtures Type C		
4.1.2D	self-reactive substances and mixtures Type D		
4.1.2E	self-reactive substances and mixtures Type E		
4.1.2F	self-reactive substances and mixtures Type F	Not required	No pictogram
4.1.2G	self-reactive substances and mixtures Type G		
Pyrophoric liquids, pyrophoric solids, self-heating substances and mixtures			
4.2A	pyrophoric liquids Category 1, or pyrophoric solids Category 1		
4.2B	self-heating substances and mixtures Category 1		
4.2C	self-heating substances and mixtures Category 2		
Substances and mixtures which, in contact with water, emit flammable gases			
4.3A	substances and mixtures which, in contact with water, emit flammable gases Category 1		
4.3B	substances and mixtures which, in contact with water, emit flammable gases Category 2		
4.3C	substances and mixtures which, in contact with water, emit flammable gases Category 3		
Desensitised explosives			
HSNO/UNRTDG and GHS do not align for this class			
3.2A / 3.2B / 3.2C	desensitised explosive Category 1		
solid desensitised explosives	desensitised explosive Category 2		
4.1.3A / 4.1.3B / 4.1.3C	desensitised explosive Category 3		
liquid desensitised explosives	desensitised explosive Category 4		

Physical Hazards		UNRTDG	GHS
Oxidising substances that are liquids or solids			
5.1.1A	oxidising liquids Category 1, or oxidising solids Category 1		
5.1.1B	oxidising liquids Category 2, or oxidising solids Category 2		
5.1.1C	oxidising liquids Category 3, or oxidising solids Category 3		
Oxidising gases			
5.1.2A	oxidising gases Category 1		
Organic peroxides			
5.2A	organic peroxide Type A	May not be able to be transported	
5.2B	organic peroxide Type B		
5.2C	organic peroxide Type C		
5.2D	organic peroxide Type D		
5.2E	organic peroxide Type E		
5.2F	organic peroxide Type F		
5.2G	organic peroxide Type G	Not required	No pictogram
Corrosive to metals			
8.1A	corrosive to metals Category 1		

Correlation between HSNO Classifications & GHS Classifications (2021 NZ Implementation)

with Pictograms – GHS pictograms & UNRTDG pictograms (UN recommendations on the transport of Dangerous Goods)

Health Hazards		UNRTDG	GHS
Acute Toxicity			
6.1A oral, dermal, inhalation	acute oral toxicity Category 1 acute dermal toxicity Category 1 acute inhalation toxicity Category 1		
6.1B oral, dermal, inhalation	acute oral toxicity Category 2 acute dermal toxicity Category 2 acute inhalation toxicity Category 2		
6.1C oral, dermal, inhalation	acute oral toxicity Category 3 acute dermal toxicity Category 3 acute inhalation toxicity Category 3		
6.1D oral, dermal, inhalation	acute oral toxicity Category 4 acute dermal toxicity Category 4 acute inhalation toxicity Category 4	Not required	
6.1E oral, dermal, inhalation	Note: acute toxicity Category 5 has not been adopted		
Aspiration hazard			
6.1E aspiration hazard	aspiration hazard Category 1 Note: aspiration hazard Category 2 has not been adopted	Not required	
Skin corrosion/irritation			
8.2A	skin corrosion Category 1A		
8.2B	skin corrosion Category 1B		
8.2C	skin corrosion Category 1C		
6.3A	skin irritation Category 2	Not required	
6.3B	Note: skin irritation Category 3 has not been adopted		
Serious eye damage/eye irritation			
8.3A	serious eye damage Category 1	Not required	
6.4A	eye irritation Category 2 Note: The subcategories 2A and 2B have not been adopted	Not required	

Respiratory or skin sensitisation			
6.5A	respiratory sensitisation Category 1	Not required	
6.5B	skin sensitisation Category 1	Not required	
Germ cell mutagenicity			
6.6A	germ cell mutagenicity Category 1	Not required	
6.6B	germ cell mutagenicity Category 2		
Carcinogenicity			
6.7A	carcinogenicity Category 1	Not required	
6.7B	carcinogenicity Category 2		
Reproductive toxicity			
6.8A	reproductive toxicity Category 1	Not required	
6.8B	reproductive toxicity Category 2		
6.8C	reproductive toxicity additional category for effects on or via lactation		No pictogram
Specific target organ toxicity			
6.9A oral, dermal, inhalation	specific target organ toxicity – single exposure Category 1 specific target organ toxicity – repeated exposure Category 1	Not required	
6.9B oral, dermal, inhalation	specific target organ toxicity – single exposure Category 2 specific target organ toxicity – repeated exposure Category 2		
6.9B narcotic effects	specific target organ toxicity – single exposure Category 3 narcotic effects		
6.1E respiratory tract irritant	specific target organ toxicity – single exposure Category 3 respiratory tract irritant		

Environmental Hazards		UNRTDG	GHS
Hazardous to the aquatic environment			
9.1A	hazardous to the aquatic environment acute Category 1 hazardous to the aquatic environment chronic Category 1		
9.1B	hazardous to the aquatic environment chronic Category 2 Note: hazardous to the aquatic environment acute Category 2 and has not been adopted		
9.1C	hazardous to the aquatic environment chronic Category 3 Note: hazardous to the aquatic environment acute Category 3 has not been adopted	Not required	No pictogram
9.1D	hazardous to the aquatic environment chronic Category 4		
Hazardous to the terrestrial environment These apply only to agrichemicals			
9.2A, 9.2B, 9.2C, 9.2D	hazardous to soil organisms	These classifications are not part of UNRTDG or GHS	
9.3A, 9.3B, 9.3C	hazardous to terrestrial vertebrates		
9.4A, 9.4B, 9.4C	hazardous to terrestrial invertebrates		
9.1D designed for biocidal action	designed for biocidal action		