



Environmental
Protection Authority
Te Mana Rauhi Taiao

Labelling of hazardous substances

Hazard and precautionary information

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TECHNICAL GUIDE

New Zealand Government

Labelling of Hazardous Substances: Hazard and Precautionary Information

This document describes a procedure for manufacturers and suppliers to determine the pictograms, signal word, and hazard and precautionary statements required on the label of a hazardous substance. It is based on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).¹ The codification system used in this document for the hazard and precautionary statements are based on the latest proposals presented to the UN GHS committee. As the GHS precautionary statements have not yet been fully harmonised they may be subject to further development. Any such changes will be reflected in future updates of this document.

How to Use this Document

From an evaluation of a substance's hazardous properties, the substance will be given a classification according to the Hazardous Substances (Classification) Regulations 2001. This classification must be known before hazard and precautionary information requirements can be determined. The following procedure is then used to find the required signal words, hazard pictograms and hazard and precautionary statements that need to be displayed on the label of the substance's packaging.

The pictograms, signal word, and hazard and precautionary statements required on the label of a hazardous substance can be obtained using the central Table 1 and accompanying Tables 2 to 6 of this document. Table 1 provides the signal word, pictograms, and codes for the hazard and precautionary statements required for every HSNO classification. Tables 2 to 6 provide a means of converting hazard and precautionary statement codes into the actual statements required.² Thus, the following basic procedure can be used to locate the signal word, pictograms, and hazard and precautionary statements required for a hazardous substance:

Step 1 Note the signal word, pictogram, and hazard and precautionary statement codes in Table 1 required for each of the HSNO classifications of the substance. Precautionary statements comprise prevention, response, storage and disposal statements. If a substance is acutely toxic by more than one route of exposure (for example, it is classified as 6.1B for oral exposure and 6.1D for inhalational exposure), then the hazard and precautionary statements for both of these classifications will need to be identified as they will convey different messages. Only the pictogram and signal word for the higher classification (6.1B), however, would need to be used – see principles of precedence in Step 3.

¹ First Revised Edition, United Nations (2005), ISBN 92-1-116927-5.

² The codes are to be used only for reference purposes – they should not form part of the statement text that appears on a label, nor replace it.

Step 2 Convert the applicable hazard and precautionary codes into text using Tables 2 to 5.³ The core parts of the hazard and precautionary statements are written in bold text.

The following symbols and *italicised text* are used to depict, and provide guidance, when flexibility and variation is appropriate in the construction of a statement:⁴

- a forward slash [/] depicts that a choice needs to be made between the words it separates, and only the words appropriate to the substance should be selected, e.g. "... avoid breathing dust/fumes/gas/mist/vapours/spray" could read "avoid breathing vapours";
- three equally spaced full stops [...], indicates missing words where the manufacturer/supplier is able to incorporate further information specific to their substance into the hazard statement;
- the use of 'less than' [<] and 'greater than' [>] symbols enclosing italicised text provides guidance as to the type of information required at the preceding full stops [...];
- the use of an asterisk [*] followed by italicised text provides guidance where information in the statement varies according to specific hazard types;
- the use of italicised text following a dash [-] provides guidance of certain conditions when the statement may or may not be applicable.

Step 3 Apply the following principles of precedence to avoid excessive labelling and duplication:

- if the signal word "danger" applies, the signal word "warning" should not appear;
- if the skull and crossbones pictogram applies, the exclamation mark pictogram should not appear;
- if the corrosive pictogram applies, the exclamation mark pictogram should not appear where it is used for skin or eye irritation;
- if the health hazard pictogram⁵ appears for respiratory sensitization, the exclamation mark pictogram should not appear where it is used for skin sensitisation or for skin or eye irritation.
- Where there is both a GHS and Transport of Dangerous Goods pictogram for a given HSNO classification, the following rules apply:
 - Where a Transport pictogram appears on a label, a GHS pictogram for the same hazard should not appear
 - A Transport pictogram can be used on a label in the workplace instead of a GHS pictogram but the reverse cannot apply
 - Transport pictograms must be used for transport.
- In the majority of cases, the indicated precautionary statements are independent. For example, the phrases for explosive hazards do not modify those related to certain health hazards and products that are classified for both hazard classes should bear appropriate precautionary

³ A plus [+] symbol between precautionary statement codes represents a single statement that has been formed by the joining of statements; these merged single statements are transformed to text in the latter parts of each of Tables 3-5.

⁴ These symbols and the text in italics are not to be included in the actual hazard or precautionary statement, as they are there only to provide guidance as to when flexibility and variation are required.

⁵ 

statements for both. Where a substance or mixture is classified for a number of health hazards, the most stringent set of precautionary statements should generally be selected. With respect to 'response' statements, rapid action may be crucial. For example, if a chemical is carcinogenic and acutely toxic then the first aid measures for acute toxicity will take precedence over those for longer term effects. Precautionary information must not be lost, however, by the use of fewer statements.

In addition to the prevention, response, storage and disposal precautionary statements which are assigned on the basis of hazard classification, there are three general precautionary statements which are assigned on the basis of use and not hazard. These are the following statements, which should be used in the case of substances that are available to the general public.

The response statement:

P101 If medical advice is needed, have product container or label at hand






The prevention statements:

P102 Keep out of reach of children

P103 Read label before use







These statements are included in Table 1 against hazard classifications which may be applicable to substances that can be available to the general public. They are more generally applicable to substances which are classified as hazardous to health. They are notated with an * to indicate that they are only required when the substance may be available to the general public but are not required when the substance is restricted to places of work to which the public do not have access. Group Standards follow this approach. Note, however, that for classifications 6.1A – D, the statement P102 - Keep out of reach of children is required in all cases, including places of work, by the Hazardous Substances (Identification) Regulations 2001.

Table 1. Hazard and Precautionary Information for HSNO Classifications
Physical Hazards

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
Unstable explosives ^a	No pictogram assigned in UN RTDG. (Transport not allowed)		Danger	H200	P201 P202 P281	P372 P373 P380	P401	P501
1.1			Danger	H201	P210 P230 P240 P250 P280	P370 + P380 P372 P373	P401	P501
1.2			Danger	H202	P210 P230 P240 P250 P280	P370 + P380 P372 P373	P401	P501







^a Not a HSNO category and not allowed for transport.

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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
1.3			Danger	H203	P103 ^b P210 P230 P240 P250 P280	P370 + P380 P372 P373	P401	P501
1.4			Danger	H204	P103 ^b P210 P240 P250 P280	P370 + P380 P372 ^c /P374 ^d P373	P401	P501
1.5			Danger	H205	P210 P230 P240 P250 P280	P370 + P380 P372 P373	P401	P501

^b Use only if substance is available to the general public.^c Use this prevention statement for substances that do not have a HSNO 1.4S classification and are ammunition or components thereof.^d Use this prevention statement for substances that have a HSNO 1.4S classification and are ammunition or components thereof.

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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
1.6			No signal word	No hazard statement	No prevention statements	No response statements	No storage statements	No disposal statements
2.1.1A			Danger	H220	P103 ^b P210	P377 P381	P403	No disposal statements
2.1.1B	Not required under the UN RTDG Model Regulations	No pictogram	Warning	H221	P103 ^b P210	P377 P381	P403	No disposal statements
2.1.2A ^e			Danger	H222	P103 ^b P210 P211 P251	No response statements	P410 + P412	No disposal statements







^e Use this row of hazard and precautionary information if the flammable aerosol contains $\geq 85\%$ flammable components and has a heat of combustion ≥ 30 kJ/g; or in the GHS aerosol ignition distance test, ignition occurs at a distance ≥ 75 cm.

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
2.1.2A ^f			Warning	H223	P103 ^b P210 P211 P251	No response statements	P410 + P412	No disposal statements
Liquefied Gas ^g			Warning	H280	P103 ^b	No response statements	P410 + P403	No disposal statements
Refrigerated liquefied Gas ^g			Warning	H281	P103 ^b P282	P336 P315	P403	No disposal statements
Dissolved Gas ^g			Warning	H280	P103 ^b	No response statements	P410 + P403	No disposal statements






^f Use this row of hazard and precautionary information if the flammable aerosol contains $\geq 45\%$ flammable components, but does not meet the criteria of note d.

^g Not a HSNO requirement, but required under Land Transport Rule 45001/1: Dangerous Goods 2005.









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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
3.1A			Danger	H224	P103 ^b P210 P233 P240 P241 P242 P243 P280	P303 +P361 + P353 P370 + P378	P403 + P235	P501
3.1B			Danger	H225	P103 ^b P210 P233 P240 P241 P242 P243 P280	P303 +P361 + P353 P370 + P378	P403 + P235 P501	P501
3.1C			Warning	H226	P103 ^b P210 P233 P240 P241	P303 +P361 + P353 P370 + P378	P403 + P235	P501







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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
					P242 P243 P280			
3.1D	Not required under the UN RTDG Model Regulations	No pictogram	Warning	H227	P103 ^b P210 P280	P370 + P378	P403 + P235	P501
4.1.1A			Danger	H228	P103 ^b P210 P240 P241 P280	P370 + P378	No storage statements	P501
4.1.1B			Warning	H228	P103 ^b P210 P240 P241 P280	P370 + P378	No storage statements	P501
4.1.2A	Same as for explosives (follow the same symbol selection process)		Danger	H240	P210 P220 P234 P280	P370 + P378 P370 + P380 + P375	P403 + P235 P411 P420	P501









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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
4.1.2B	 	 	Danger	H241	P210 P220 P234 P280	P370 + P378 P370 + P380 + P375	P403 + P235 P411 P420	P501
4.1.2C			Danger	H242	P210 P220 P234 P280	P370 + P378	P403 + P235 P411 P420	P501
4.1.2D			Danger	H242	P210 P220 P234 P280	P370 + P378	P403 + P235 P411 P420	P501









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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
4.1.2E			Warning	H242	P210 P220 P234 P280	P370 + P378	P403 + P235 P411 P420	P501
4.1.2F			Warning	H242	P210 P220 P234 P280	P370 + P378	P403 + P235 P411 P420	P501
4.1.2G	Not required under the UN RTDG Model Regulations	No pictogram	No signal word	No hazard statement	No prevention statement	No response statements	No storage statements	No disposal statements
4.2A (liquids)			Danger	H250	P210 P222 P280	P302 + P334 P370 + P378	P422	P501

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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
4.2A (solids)			Danger	H250	P210 P222 P280	P335 + P334 P370 + P378	P422	P501
4.2B			Danger	H251	P103 ^b P235 + P410 P280	No response statements	P407 P413 P420	P501
4.2C			Warning	H252	P103 ^b P235 + P410 P280	No response statements	P407 P413 P420	P501
4.3A			Danger	H260	P223 P231 + P232 P280	P335 + P334 P370 + P378	P402 + P404	P501

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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
4.3B			Danger	H261	P103 ^b P223 P231 + P232 P280	P335 + P334 P370 + P378	P402 + P404	P501
4.3C			Warning	H261	P103 ^b P231 + P232 P280	P370 + P378	P402 + P404	P501
5.1.1A			Danger	H271	P210 P220 P221 P280 P283	P306 + P360 P370 + P378 P371 + P380 + P375	No storage statements	P501
5.1.1B			Danger	H272	P103 ^b P210 P220 P221 P280	P370 + P378	No storage statements	P501

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
5.1.1C			Warning	H272	P103 ^b P210 P220 P221 P280	P370 + P378	No storage statements	P501
5.1.2A			Danger	H270	P103 ^b P220 P244	P370 + P376	P403	No disposal statements
5.2A	Same as for explosives (follow the same symbol selection process)		Danger	H240	P210 P220 P234 P280	No response statements	P411 + P235 P410 P420	P501









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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
5.2B			Danger	H241	P210 P220 P234 P280	No response statements	P411 + P235 P410 P420	P501
5.2C			Danger	H242	P103 ^b P210 P220 P234 P280	No response statements	P411 + P235 P410 P420	P501
5.2D			Danger	H242	P103 ^b P210 P220 P234 P280	No response statements	P411 + P235 P410 P420	P501









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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
5.2E			Warning	H242	P103 ^b P210 P220 P234 P280	No response statements	P411 + P235 P410 P420	P501
5.2F			Warning	H242	P103 ^b P210 P220 P234 P280	No response statements	P411 + P235 P410 P420	P501
5.2G	Not required under the UN RTDG Model Regulations	No pictogram	No signal word	No hazard statement	P103 ^b	No response statements	No storage statements	No disposal statements





Health Hazards

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.1A (oral)			Danger	H300	P102 P264 P270	P301 + P310 P321 P330	P405	P501
6.1A (dermal)			Danger	H310	P102 P262 P264 P270 P280	P302 + P350 P310 P322 P361 P363	P405	P501
6.1A (inhalation – vapours, dusts or mists)			Danger	H330	P102 P260 P271 P284	P304 + P340 P310 P320	P403 + P233 P405	P501
6.1A (inhalation – gases)			Danger	H330	P102 P260 P271 P284	P304 + P340 P310 P320	P403 + P233 P405	P501


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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.1B (oral)			Danger	H300	P102 P264 P270	P301 + P310 P321 P330	P405	P501
6.1B (dermal)			Danger	H310	P102 P262 P264 P270 P280	P302 + P350 P310 P322 P361 P363	P405	P501
6.1B (inhalation – vapours, dusts or mists)			Danger	H330	P102 P260 P271 P284	P304 + P340 P310 P320	P403 + P233 P405	P501
6.1B (inhalation – gases)			Danger	H330	P102 P260 P271 P284	P304 + P340 P310 P320	P403 + P233 P405	P501




HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.1C (oral)			Danger	H301	P102 P103 ^b P264 P270	P101 ^b P301 + P310 P321 P330	P405	P501
6.1C (dermal)			Danger	H311	P102 P103 ^b P280	P101 ^b P302 + P352 P312 P322 P361 P363	P405	P501
6.1C (inhalation – vapours, dusts or mists)			Danger	H331	P102 P103 ^b P261 P271	P101 ^b P304 + P340 P311 P321	P403 + P233 P405	P501
6.1C (inhalation – gases)			Danger	H331	P102 P103 ^b P261 P271	P101 ^b P304 + P340 P311 P321	P403 + P233 P405	P501

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.1D (oral)	Not applicable for the UN RTDG Model Regulations		Warning	H302	P102 P103 ^b P264 P270	P101 ^b P301 + P312 P330	No storage statements	P501
6.1D (dermal)	Not applicable for the UN RTDG Model Regulations		Warning	H312	P102 P103 ^b P280	P101 ^b P302 + P352 P312 P322 P363	No storage statements	P501
6.1D (inhalation – vapours, dusts or mists)	Not applicable for the UN RTDG Model Regulations		Warning	H332	P102 P103 ^b P261 P271	P101 ^b P304 + P340 P312	No storage statements	P501
6.1D (inhalation – gases)	Not applicable for the UN RTDG Model Regulations		Warning	H332	P102 P103 ^b P261 P271	P101 ^b P304 + P340 P312	No storage statements	P501
6.1E (oral)	Not applicable for the UN	No pictogram	Warning	H303	P102 ^b	P101 ^b	No storage statements	P501

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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
	RTDG Model Regulations				P103 ^a	P312		
6.1E (dermal)	Not applicable for the UN RTDG Model Regulations	No pictogram	Warning	H313	P102 ^b P103 ^b	P101 ^b P312	No storage statements	P501
6.1E (inhalation – vapours, dusts or mists)	Not applicable for the UN RTDG Model Regulations	No pictogram	Warning	H333	P102 ^b P103 ^b	P101* P304 + P312	No storage statements	P501
6.1E (inhalation – gases)	Not applicable for the UN RTDG Model Regulations	No pictogram	Warning	H333	P102 ^b P103 ^b	P101 ^b P304 + P312	No storage statements	P501
6.1E ^h (aspiration hazard)	Not applicable for the UN RTDG Model Regulations		Danger	H304	P102 ^b P103 ^b	P101 ^b P301 + P310 P331	P405	P501




^h Use this row of hazard and precautionary information if evidence exists of the substance's human aspiration toxicity including chemical pneumonia, pulmonary injury or death following aspiration, or for hydrocarbons with a kinematic viscosity of ≤ 20.5 mm²/s measured at 40°C.

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.1E ⁱ (aspiration hazard)	Not applicable for the UN RTDG Model Regulations		Warning	H305	P102 ^b P103 ^b	P101 ^b P301 + P310 P331	P405	P501
6.3A	Not applicable for the UN RTDG Model Regulations		Warning	H315	P103 ^b P264 P280	P302 + P352 P321 P332 + P313 P362	No storage statements	P501
6.3B	Not applicable for the UN RTDG Model Regulations	No pictogram	Warning	H316	P103 ^b	P332 + P313	No storage statements	P501
6.4A ^j	Not applicable for the UN RTDG Model Regulations		Warning	H319	P103 ^b P264 P280	P305 + P351 + P338 P337 + P313	No storage statements	P501

ⁱ Use this row of hazard and precautionary information if the substance does not meet criteria for note g; but, on the basis of animal studies and expert judgement, the substance is presumed to cause human aspiration toxicity and has a kinematic viscosity of ≤ 14 mm²/s measured at 40°C.





^j Use this hazard statement if adverse effects to the eye are fully reversible between 7 and 21 days.




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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.4A ^k (mild irritant)	Not applicable for the UN RTDG Model Regulations	No pictogram	Warning	H320	P103 ^b P264	P305 + P351 + P338 P337 + P313	No storage statements	P501
6.5A	Not applicable for the UN RTDG Model Regulations		Danger	H334	P103 ^b P261 P285	P304 + P341 P342 + P311	No storage statements	P501
6.5B	Not applicable for the UN RTDG Model Regulations		Warning	H317	P103 ^b P261 P272 P280	P302 + P352 P333 + P313 P321 P363	No storage statements	P501
6.6A	Not applicable for the UN RTDG Model Regulations		Danger	H340	P103 ^b P201 P202 P281	P308 + P313	P405	P501





^k Use this hazard statement if adverse effects to the eye are fully reversible within 7 days.

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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.6B	Not applicable for the UN RTDG Model Regulations		Warning	H341	P103 ^b P201 P202 P281	P308 + P313	P405	P501
6.7A	Not applicable for the UN RTDG Model Regulations		Danger	H350	P103 ^b P201 P202 P281	P308 + P313	P405	P501
6.7B	Not applicable for the UN RTDG Model Regulations		Warning	H351	P103 ^b P201 P202 P281	P308 + P313	P405	P501
6.8A	Not applicable for the UN RTDG Model Regulations		Danger	H360	P103 ^b P201 P202 P281	P308 + P313	P405	P501

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.8B	Not applicable for the UN RTDG Model Regulations		Warning	H361	P103 ^b P201 P202 P281	P308 + P313	P405	P501
6.8C	Not applicable for the UN RTDG Model Regulations	No Pictogram	No Signal Word	H362	P103 ^b P201 P260 P263 P264 P270	P308 + P313	No storage statements	P501
6.9A (Single exposure)	Not applicable for the UN RTDG Model Regulations		Danger	H370	P103 ^b P260 P264 P270	P307 + P311 P321	P405	P501
6.9A (Repeated exposure)	Not applicable for the UN RTDG Model Regulations		Danger	H372	P103 ^b P260 P264 P270	P314	No storage statements	P501




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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.9B (Single exposure)	Not applicable for the UN RTDG Model Regulations		Warning	H371	P103 ^b P260 P264 P270	P309 + P311	P405	P501
6.9B (Repeated exposure)	Not applicable for the UN RTDG Model Regulations		Warning	H373	P103 ^b P260	P314	No storage statements	P501
6.9 (Respiratory tract irritant)	Not applicable for the UN RTDG Model Regulations		Warning	H335	P103 ^b P261 P271	P304 + P340 P312	P403 + P233 P405	P501
6.9 (Narcotic)	Not applicable for the UN RTDG Model Regulations		Warning	H336	P103 ^b P261 P271	P304 + P340 P312	P403 + P233 P405	P501

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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
8.1A			Warning	H290	P102 ^b P103 ^b P234	P101 ^b P390	P406	P501
8.2A			Danger	H314	P102 ^b P103 ^b P260 P264 P280	P101 ^b P301 + P330 + P331 P303 + P361 + P353 P363 P304 + P340 P310 P321 P305 + P351 + P338	P405	P501
8.2B			Danger	H314	P102 ^b P103 ^b P260 P264 P280	P101 ^b P301 + P330 + P331 P303 + P361 + P353 P363 P304 + P340	P405	P501

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HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
						P310 P321 P305 + P351 + P338		
8.2C			Danger	H314	P102 ^b P103 ^b P260 P264 P280	P101 ^b P301 + P330 + P331 P303 + P361 + P353 P363 P304 + P340 P310 P321 P305 + P351 + P338	P405	P501
8.3A	Not applicable for the UN RTDG Model Regulations		Danger	H318	P102 ^b P103 ^b P280	P101 ^b P305 + P351 + P338 P310	No storage statements	P501

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
9.1A			Warning	H400 ^l /H410 ^m	P103 ^b P273	P391	No storage statements	P501
9.1B			No Signal Word	H411	P103 ^b P273	P391	No storage statements	P501
9.1C	Not applicable for the UN RTDG Model Regulations	No Pictogram	No Signal Word	H412	P103 ^b P273	No response statements	No storage statements	P501
9.1D	Not applicable for the UN RTDG Model Regulations	No Pictogram	No Signal Word	H401 ⁿ /H402 ^o / H413 ^p	P103 ^b P273	No response statements	No storage statements	P501

^l Use this hazard statement if the substance is neither persistent nor bioaccumulative.




^m Use this hazard statement if the substance is persistent or bioaccumulative.

ⁿ Use this hazard statement if the substance has an aquatic ecotoxicity L(E)C50 between 1 and 10 mg/l, and is neither persistent nor bioaccumulative.

^o Use this hazard statement if the substance has an aquatic ecotoxicity L(E)C50 between 10 and 100 mg/l, and is neither persistent nor bioaccumulative.

^p Use this hazard statement if the substance is persistent or bioaccumulative but not acutely ecotoxic.

Labelling of Hazardous Substances: Hazard and Precautionary Information

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
9.2A	Not applicable for the UN RTDG Model Regulations		Warning	H421	P103 ^b P273	P391	No storage statements	P501
9.2B	Not applicable for the UN RTDG Model Regulations		No Signal Word	H422	P103 ^b P273	P391	No storage statements	P501
9.2C	Not applicable for the UN RTDG Model Regulations	No Pictogram	No Signal Word	H423	P103 ^b P273	No response statements	No storage statements	P501
9.2D	Not applicable for the UN RTDG Model Regulations	No Pictogram	No Signal Word	H423	P103 ^b P273	No response statements	No storage statements	P501
9.3A	Not applicable for the UN RTDG Model Regulations		Warning	H431	P103 ^b P273	P391	No storage statements	P501

Labelling of Hazardous Substances: Hazard and Precautionary Information




HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
9.3B	Not applicable for the UN RTDG Model Regulations		No Signal Word	H432	P103 ^b P273	P391	No storage statements	P501
9.3C	Not applicable for the UN RTDG Model Regulations	No Pictogram	No Signal Word	H433	P103 ^b P273	No response statements	No storage statements	P501
9.4A	Not applicable for the UN RTDG Model Regulations		Warning	H441	P103 ^b P273	P391	No storage statements	P501
9.4B	Not applicable for the UN RTDG Model Regulations		No Signal Word	H442	P103 ^b P273	P391	No storage statements	P501
9.4C	Not applicable for the UN RTDG Model Regulations	No Pictogram	No Signal Word	H443	P103 ^b P273	No response statements	No storage statements	P501

Table 2: Codification of Hazard Statements

Code	Hazard Statement
H200	Unstable explosive.
H201	Explosive; mass explosion hazard.
H202	Explosive; severe projection hazard.
H203	Explosive; fire, blast or projection hazard.
H204	Fire or projection hazard.
H205	May mass explode in fire.
H220	Extremely flammable gas.
H221	Flammable gas.
H222	Extremely flammable aerosol.
H223	Flammable aerosol.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H227	Combustible liquid.
H228	Flammable solid.
H240	Heating may cause an explosion.
H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H250	Catches fire spontaneously if exposed to air.
H251	Self-heating; may catch fire.
H252	Self-heating in large quantities; may catch fire.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H261	In contact with water releases flammable gas.

Code	Hazard Statement
H270	May cause or intensify fire; oxidizer.
H271	May cause fire or explosion; strong oxidizer.
H272	May intensify fire; oxidizer.
H280	Contains gas under pressure; may explode if heated.
H281	Contains refrigerated gas; may cause cryogenic burns or injury.
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H305	May be harmful if swallowed and enters airways.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H330	Fatal if inhaled.

Code	Hazard Statement
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H333	May be harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects ... <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H341	Suspected of causing genetic defects ... <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H350	May cause cancer ... <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H351	Suspected of causing cancer ... <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H360	May damage fertility or the unborn child ... <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H361	Suspected of damaging fertility or the unborn child ... <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H362	May cause harm to breast-fed children.
H370	Causes damage to organs ... <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H371	May cause damage to organs ... <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H372	Causes damage to organs ... <or state all organs affected, if known> through prolonged or repeated exposure ... <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H373	May cause damage to organs ... <or state all organs affected, if known> through prolonged or repeated exposure ... <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.

Code	Hazard Statement
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
H421	Very toxic to the soil environment.
H422	Toxic to the soil environment.
H423	Harmful to the soil environment.
H431	Very toxic to terrestrial vertebrates.
H432	Toxic to terrestrial vertebrates.
H433	Harmful to terrestrial vertebrates.
H441	Very toxic to terrestrial invertebrates.
H442	Toxic to terrestrial invertebrates.
H443	Harmful to terrestrial invertebrates.

Table 3. Codification of Prevention Statements

Code	Prevention Statement
P102	Keep out of reach of children. <i>This statement applies only where the substance is available to the general public.</i>
P103	Read label before use. <i>This statement applies only where the substance is available to the general public.</i>
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces* <specify applicable ignition source(s)>. No smoking. * In the case of a HSNO 3.1D substance, specify to keep away from flames and hot surfaces. * In the case of a HSNO class 5.1.1 substance; specify to keep away from heat.

Code	Prevention Statement
P211	Do not spray on an open flame or other ignition source.
P220	Keep/Store away from clothing/... <i><specify incompatible material(s)></i> /combustible materials.
P221	Take any precaution to avoid mixing with combustibles/ ... <i><specify incompatible materials></i> .
P222	Do not allow contact with air.
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P230	Keep wetted with ... <i><specify appropriate material(s)></i> . <i>This statement applies only where drying out increases the explosion hazard, except as needed for manufacturing or operating processes (e.g. nitrocellulose).</i>
P231	Handle under inert gas.
P232	Protect from moisture.
P233	Keep container tightly closed. <i>In the case of a HSNO 6.1A-C (inhalation) substance, or 6.9 (narcotic or respiratory tract irritant), this statement applies only where the substance is volatile so as to generate a hazardous atmosphere (unless the substance also has a HSNO 3.1A-C classification, in which case this statement always applies).</i>
P234	Keep only in original container.
P235	Keep cool.
P240	Ground/bond container and receiving equipment. <i>In the case of a HSNO class 1 substance, this statement applies if the substance is electrostatically sensitive.</i> <i>In the case of a HSNO 3.1A-C substance; this statement applies if the electrostatically sensitive material is for reloading, or the substance is volatile so as to generate a hazardous atmosphere.</i> <i>In the case of a HSNO class 4.1.1 substance, this statement applies if electrostatically sensitive material is for reloading.</i>
P241	Use explosion-proof electrical/ventilating/lighting/... <i><specify any other applicable type(s) of explosive-proof equipment></i> equipment. <i>In the case of a HSNO class 4.1.1 substance, this statement applies if dust clouds can occur.</i>
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P244	Keep reduction valves free from grease and oil.
P250	Do not subject to grinding/shock/friction/ ... <i><specify any other applicable type(s) of rough handling></i> .
P251	Pressurized container: Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray*.

Code	Prevention Statement
	<p><i>* specify applicable conditions</i></p> <p><i>In the case of a HSNO 6.8C or class 8.2 substance, this statement applies if inhalable particles of dusts or mists may occur during use (unless the substance also has a HSNO 6.1A (inhalation), HSNO 6.1B (inhalation), 6.9A, or 6.9B classification in which case the statement always applies).</i></p>
P261	<p>Avoid breathing dust/fume/gas/mist/vapours/spray*.</p> <p><i>* specify applicable conditions</i></p>
P262	Do not get in eyes, on skin, or on clothing.
P263	Avoid contact during pregnancy/while nursing.
P264	Wash ... <i><specify parts of the body to be washed after handling></i> thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	<p>Avoid release to the environment.</p> <p><i>This statement does not apply where this is the intended use.</i></p>
P280	<p>Wear protective gloves/protective clothing/eye protection/face protection*.</p> <p><i>* In the case of a HSNO class 1 substance, specify face protection.</i></p> <p><i>* In the case of a HSNO class 3.1, 4.1.1, 4.1.2, 4.2, 4.3, 5.1.1, or 5.2 substance; specify to wear protective gloves and eye/face protection.</i></p> <p><i>* In the case of a HSNO 6.1A-D (dermal) substance, specify to wear protective gloves/clothing.</i></p> <p><i>* In the case of a HSNO class 8.2 substance, specify to wear gloves/clothing and eye/face protection.</i></p> <p><i>* In the case of a HSNO 6.3A or 6.5B, specify to wear protective gloves.</i></p> <p><i>* In the case of a HSNO 6.4A or 8.3A, specify to wear eye/face protection.</i></p>
P281	Use personal protective equipment as required.
P282	Wear cold insulating gloves/face shield/eye protection.
P283	Wear fire/flame resistant/retardant clothing.
P284	<p>Wear respiratory protection.*</p> <p><i>*Specify appropriate type of equipment</i></p>
P285	<p>In case of inadequate ventilation wear respiratory protection.*</p> <p><i>*Specify appropriate type of equipment</i></p>
P231 + P232	Handle under inert gas. Protect from moisture.
P235 + P410	Keep cool. Protect from sunlight.

Table 4. Codification of Response Statements

Code	Response Statement
P101	If medical advice is needed, have product container or label at hand. <i>This statement applies only where the substance is available to the general public.</i>
P301	IF SWALLOWED:
P302	IF ON SKIN:
P303	IF ON SKIN (or hair):
P304	IF INHALED:
P305	IF IN EYES:
P306	IF ON CLOTHING:
P307	IF exposed:
P308	IF exposed or concerned:
P309	IF exposed or if you feel unwell:
P310	Immediately call a POISON CENTER or doctor/physician.
P311	Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P313	Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P315	Get immediate medical advice/attention.
P320	Specific treatment is urgent (see ... <reference to supplemental first aid instruction> on this label). <i>This statement applies if immediate administration of antidote is required.</i>
P321	Specific treatment (see ... <reference to supplemental first aid instruction> on this label).* <i>* In the case of a HSNO 6.3A, 6.5B, or class 8.2 substance; specify a cleansing agent if appropriate. In the case of a HSNO 6.1A-C (oral) substance, this statement applies if immediate administration of antidote is required. In the case of a HSNO 6.1C (inhalation) substance, this statement applies if immediate specific measures are required. In the case of a HSNO 6.9A (single exposure) substance, this statement applies if immediate measures are required.</i>
P322	Specific measures (see ... <reference to supplemental first aid instruction> on this label). <i>In the case of a HSNO 6.1A (dermal) or 6.1B (dermal) substance, this statement applies if immediate measures are advised (such as a specific cleansing agent). In the case of a HSNO 6.1C (dermal) or 6.1D (dermal) substance, this statement applies if measures are advised (such as a specific cleansing agent).</i>
P330	Rinse mouth.

Code	Response Statement
P331	Do NOT induce vomiting.
P332	If skin irritation occurs:
P333	If skin irritation or rash occurs:
P334	Immerse in cool water/wrap in wet bandages.
P335	Brush off loose particles from skin.
P336	Thaw frosted parts with lukewarm water. Do not rub affected area.
P337	If eye irritation persists:
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P340	Remove to fresh air and keep at rest in a position comfortable for breathing.
P341	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P342	If experiencing respiratory symptoms:
P350	Gently wash with plenty of soap and water.
P351	Rinse cautiously with water for several minutes.
P352	Wash with plenty of soap and water.
P353	Rinse skin with water/shower.
P360	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P361	Remove/Take off immediately all contaminated clothing.
P362	Take off contaminated clothing and wash before re-use.
P363	Wash contaminated clothing before reuse.
P370	In case of fire:
P371	In case of major fire and large quantities:
P372	Explosion risk in case of fire. <i>Don't use if explosives are 1.4S Ammunition and Components thereof</i>
P373	DO NOT fight fire when fire reaches explosives.
P374	Fight fire with normal precautions from a reasonable distance. <i>Use if explosives are 1.4S ammunition and components thereof</i>
P375	Fight fire remotely due to the risk of explosion.
P376	Stop leak if safe to do so.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P378	Use ... <i><specify appropriate media></i> for extinction.

Code	Response Statement
	<i>This statement applies if water increases risk.</i>
P380	Evacuate area.
P381	Eliminate all ignition sources if safe to do so.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P334	IF ON SKIN: Immerse in cool water/wrap in wet bandages.
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P306 + P360	IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P335 + P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P370 + P376	In case of fire: Stop leak if safe to do so.

Code	Response Statement
P370 + P378	In case of fire: Use ... <i><specify appropriate media></i> for extinction <i>This statement applies if water increases risk.</i>
P370 + P380	In case of fire: Evacuate area.
P370 + P380 + P375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
P371 + P380 + P375	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Table 5. Codification of Storage Statements

Code	Storage Statement
P401	Store in accordance with ... <i><specify the relevant site and storage provisions></i> .
P402	Store in a dry place.
P403	Store in a well-ventilated place. <i>In the case of a HSNO 6.1A-C (inhalation) substance, or 6.9 (narcotic or respiratory tract irritant); this statement applies if the substance is volatile so as to generate a hazardous atmosphere.</i>
P404	Store in a closed container.
P405	Store locked up.
P406	Store in corrosive resistant/... <i><specify other compatible materials></i> container with a resistant inner liner.
P407	Maintain air gap between stacks/pallets.
P410	Protect from sunlight.
P411	Store at temperatures not exceeding ... °C <i><specify temperature></i> .
P412	Do not expose to temperatures exceeding 50 °C.
P413	Store bulk masses greater than ... kg <i><specify mass></i> at temperatures not exceeding ... °C <i><specify temperature></i> .
P420	Store away from other materials.
P422	Store contents under ... <i><specify appropriate liquid or inert gas></i> .
P402 + P404	Store in a dry place. Store in a closed container.

Code	Storage Statement
P403 + P233	Store in a well-ventilated place. Keep container tightly closed. <i>This statement applies if+ the substance is volatile so as to generate a hazardous atmosphere.</i>
P403 + P235	Store in a well-ventilated place. Keep cool.
P410 + P403	Protect from sunlight. Store in a well-ventilated place.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P411 + P235	Store at temperatures not exceeding ...°C <specify temperature>. Keep cool.

Table 6. Codification of Disposal Statements

Code	Disposal Statement
P501	<i>*In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.</i>



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