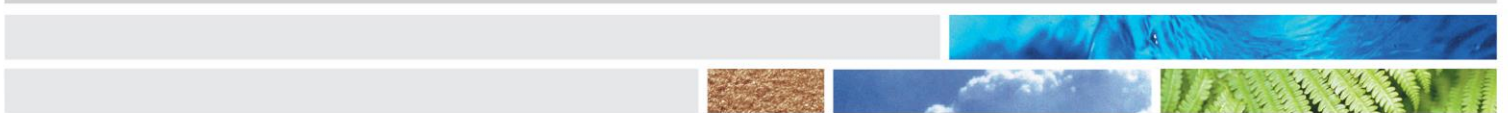




Environmental  
Protection Authority  
*Te Mana Rauhi Taiao*

# Hazardous Substances (Safety Data Sheets) Notice 2017

JULY 2017



## **EPA NOTICE**

UNDER THE HAZARDOUS SUBSTANCES AND NEW ORGANISMS ACT 1996



## Hazardous Substances and New Organisms Act 1996

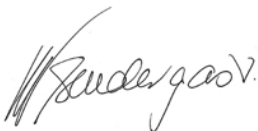
### Hazardous Substances (Safety Data Sheets) Notice 2017

This notice is issued by the Environmental Protection Authority (the Authority) under sections 75 and 76(1)(b), (f), (g) and (h) of the Hazardous Substances and New Organisms Act 1996 (the **Act**). It is issued in accordance with section 76C of the Act, having had regard to the matters specified in section 76C(2). The Authority now approves it for publication in the Gazette.

Signed at Wellington

This 27<sup>th</sup> day of July 2017

By Kerry Prendergast

A handwritten signature in black ink, appearing to read "Kerry Prendergast". The signature is written in a cursive style with some loops and flourishes.

**Chair**  
**Environmental Protection Authority**

## Hazardous Substances (Safety Data Sheets) Notice 2017

This notice is issued by the Environmental Protection Authority (the **Authority**) under sections 75 and 76(1)(b), (f), (g) and (h) of the Hazardous Substances and New Organisms Act 1996 (the **Act**). It is issued in accordance with section 76C of the Act, having had regard to the matters specified in section 76C(2).

### Table of Contents

<b>Objective of notice</b> .....	<b>4</b>
<b>Extent of consultation</b> .....	<b>4</b>
<b>Documents incorporated by reference</b> .....	<b>4</b>
<b>Further information about EPA notices</b> .....	<b>4</b>
<b>Part A: General</b> .....	<b>5</b>
1 Title .....	5
2 Commencement .....	5
3 Application .....	5
4 Definitions .....	5
<b>Part B: Safety data sheets</b> .....	<b>8</b>
5 Duties of importers and manufacturers .....	8
6 Duties of suppliers .....	8
7 Format and content of safety data sheets .....	9
8 Classification for purpose of information in safety data sheet .....	9
9 Alternative compliance for importers and manufacturers .....	9
10 Alternative compliance for suppliers .....	10
11 Use of emergency information service telephone number .....	10
<b>Part C: Transitional provisions</b> .....	<b>10</b>
12 Definitions for the purpose of this Part .....	10
13 Transitional period relating to reissued approvals .....	11
14 Transitional period relating to reissued group standards .....	11
15 Transitional period relating to revoked approvals .....	11
<b>Schedule 1: Content and format of safety data sheets</b> .....	<b>12</b>
<b>Schedule 2: Equivalent classifications in GHS</b> .....	<b>19</b>

*Administrative information: Date of notification in New Zealand Gazette: 3 November 2017.*

## Objective of notice

The objective of this notice is to consolidate and reform requirements relating to safety data sheets for hazardous substances that are supplied for use in or supply to a workplace.

## Extent of consultation

The Authority publicly notified its intention to issue this notice on 2 December 2014 by publishing a proposal document on its website. It invited comments by 20 February 2015.

A further consultation was undertaken on 19 September 2016 through the “Proposal for EPA Notices for Classification, Updates on the EPA Notices for Labelling, Safety Data Sheets, and Packaging”. The Authority invited comments by 14 October 2016.

Both proposal documents were also sent to relevant persons and other interested parties in accordance with section 76C(1)(c) of the Act. Comments were received and taken into account by the Authority during the drafting of this notice.

## Documents incorporated by reference

Information on how to access material incorporated by reference in this notice is available on the EPA website.

Documents that are incorporated by reference in this notice are also available, on request, for inspection free of charge during normal business hours at the office of the Authority.

## Further information about EPA notices

EPA notices are tertiary instruments that are administered by the Authority. They are classed as disallowable instruments under the Legislation Act 2012 (the **Legislation Act**). This means that the notice must be tabled in the House of Representatives who may, by resolution, disallow the notice. The Regulations Review Committee is the select committee responsible for considering instruments such as this notice under the Legislation Act.

The controls in this notice will apply to any Part 5 approval or group standard issued or reissued under the Act on or after the date of commencement of this notice, unless the particular approval or group standard provides otherwise. The controls will not apply to Part 5 approvals and transfer notices that are in place at the time this notice comes into force (i.e existing approvals) unless they are reissued. Information about approvals that have been reissued or revoked will be available on the EPA website.

At the time of making this notice, the relevant empowering provisions in sections 75 and 76 of the Act have not come into force. However, pursuant to section 11 of the Interpretation Act 1999, the powers may be exercised before they come into force to make this notice. The exercise of these powers is necessary or desirable in order to bring the enactment into operation. The notice will not come into force before the powers to make the notice come into force.

## Part A: General

### 1 Title

This is the Hazardous Substances (Safety Data Sheets) Notice 2017.

### 2 Commencement

This notice comes into force on 1 December 2017.

### 3 Application

- (1) This notice applies to importers, manufacturers, and suppliers of hazardous substances, in relation to the format, content, supply, and review of safety data sheets for hazardous substances for use in or supply to a workplace.
- (2) This notice does not apply in relation to —
  - (a) substances required for the motive power or control of a vehicle, aircraft, or ship, that are contained in the fuel system, electrical system, or control system of the vehicle, aircraft, or ship; or
  - (b) any fuel gas supplied or used in a gas distribution system, gas appliance, or gas installation (as these terms are defined in the Gas Act 1992) when subject to the Gas Act 1992; or
  - (c) any fuel gas transported through transmission pipelines when subject to the Health and Safety in Employment (Pipelines) Regulations 1999; or
  - (d) hazardous substances that are dangerous goods while they are being transported in accordance with any applicable requirements of a relevant transport rule.
- (3) The provisions of this notice apply subject to—
  - (a) any variation of these requirements made in accordance with sections 77 or 77A of the Act; and
  - (b) the provisions of a relevant group standard as applied in accordance with section 96E of the Act.

### 4 Definitions

- (1) In this notice, unless the context otherwise requires —

**Act** means the Hazardous Substances and New Organisms Act 1996

**Authority** means the Environmental Protection Authority established under the Environmental Protection Authority Act 2011

**CAS number** means Chemical Abstract Service number

**confidential information** means information that includes any of the following:

  - (a) trade secrets;
  - (b) information with a commercial value that would, or would be likely to, be diminished by disclosure

**dangerous good** means a substance that is listed by name as a dangerous good or is able to be assigned to a dangerous goods class in conformity with a relevant international instrument

**dangerous goods class** means groupings, numbered from 1 to 9, into which dangerous goods are assigned on the basis of a common single or most significant hazard, as specified in a relevant international instrument, and a reference to a dangerous goods class includes all divisions of that class

**environmental exposure limit** has the same meaning as in section 77B of the Act

**expert** has the same meaning as in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

**fuel gas** has the same meaning as in the Health and Safety at Work (Hazardous Substances) Regulations 2017

**GHS** means the Globally Harmonized System of Classification and Labelling of Chemicals, 5<sup>th</sup> revised edition, 2013, published by the United Nations

**hazard statement** means a statement assigned to a hazard class and category describing the nature of the hazards of a hazardous substance including, if appropriate, the degree of hazard

**HSNO classification**, in relation to a hazardous substance, means the classification that the substance has or is given in accordance with the relevant criteria in the Act, the Hazardous Substances (Classification) Notice 2017 and the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

**importer** has the same meaning as in the Customs and Excise Act 1996

**manufacture**, in relation to a hazardous substance—

- (a) means make, prepare, produce, label or pack (including packing into a container) a hazardous substance; and
- (b) includes repacking or relabelling a hazardous substance

**medical practitioner** has the same meaning as in section 143 of the Act

**Montreal Protocol** has the same meaning as Protocol in the Ozone Layer Protection Act 1996

**precautionary statement** means a statement relating to a hazardous substance of a particular classification that describes measures that should be taken to prevent or minimise adverse effects that may result from exposure to, or improper storage or handling of, the hazardous substance

**relevant international instrument** means—

- (a) the UN Model Regulations; or
- (b) the International Maritime Dangerous Goods Code 2014; or
- (c) the Technical Instructions for Safe Transport of Dangerous Goods by Air of the International Civil Aviation Organisation 2015-16; or
- (d) the Dangerous Goods Regulations of the International Air Transport Association 57th Edition, 2016

**relevant transport rule** means—

- (a) in relation to transport by land, the Land Transport Rule 45001: Dangerous Goods 2005 (made under the Land Transport Act 1998); or
- (b) in relation to transport by sea, the Maritime Rule Part 24A: Carriage of Cargoes — Dangerous Goods (made under Part 4 of the Maritime Transport Act 1994); or

- (c) in relation to transport by air, the Civil Aviation Rule Part 92: Carriage of Dangerous Goods (made under Part 3 of the Civil Aviation Act 1990)
- Rotterdam Convention** has the same meaning as in the Imports and Exports (Restrictions) Prohibition Order (No 2) 2004
- signal word** means the word “danger” or “warning”, as prescribed by the GHS or the Hazardous Substances (Labelling) Notice 2017, used on a label or in a safety data sheet to indicate to the reader the relative severity level of a hazard, and to alert the reader to a potential hazard
- supply**, in relation to a hazardous substance, includes supply (or resupply) by way of gift, sale or exchange; and occurs on the passing of possession
- tolerable exposure limit** has the same meaning as in section 77B of the Act
- UN number** means the identification number assigned to dangerous goods by the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods as published in a relevant international instrument
- workplace** has the same meaning as in the Health and Safety at Work Act 2015
- (2) A reference to a hazardous substance having a particular class or classification means—
- (a) in relation to a substance that does not have an approval under Part 5 of the Act, that it meets the criteria for that class or classification under the Hazardous Substances (Classification) Notice 2017 and the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017; or
- (b) in relation to a substance that has an approval under Part 5 of the Act, that the Authority has given it a corresponding classification in accordance with the criteria set out in paragraph (a).
- (3) The terms class 6.1E (aspiration hazard), class 6.1E (respiratory tract irritant) and class 6.9B (narcotic effects) have the same meaning as in Schedule 4 of the Hazardous Substances (Classification) Notice 2017.
- (4) Any term or expression that is defined in the Act and used, but not defined, in this notice has the same meaning as in the Act.

## Part B: Safety data sheets

### 5 Duties of importers and manufacturers

- (1) An importer or manufacturer of a hazardous substance must obtain or prepare a safety data sheet for the substance that complies with this notice—
  - (a) before first importing or manufacturing the hazardous substance for use in or supply to a workplace; or
  - (b) if that is not reasonably practicable, as soon as practicable after first importing or manufacturing the hazardous substance but before using it in or first supplying it to a workplace.
- (2) The importer or manufacturer of the hazardous substance must —
  - (a) amend the safety data sheet whenever necessary to ensure that the information remains correct and current; and
  - (b) review and reissue the safety data sheet at least once every 5 years after the first supply.
- (3) Subclause (2) does not apply if the importer or manufacturer has not imported or manufactured the hazardous substance in the past 5 years.
- (4) Where a manufacturer or importer supplies a hazardous substance to a workplace, the manufacturer must also comply with any requirements imposed on suppliers under clause 6.

### 6 Duties of suppliers

- (1) A supplier who supplies any quantity of a hazardous substance to a workplace must provide a safety data sheet that complies with this notice—
  - (a) when the hazardous substance is first supplied to the workplace; and
  - (b) if the safety data sheet for the hazardous substance is amended, when the hazardous substance is next supplied to the workplace; and
  - (c) upon request of any person in the workplace; and
  - (d) upon request of an emergency service worker for the purpose of dealing with an emergency event; or
  - (e) upon request of a medical practitioner for the purpose of dealing with an emergency event, or in relation to a notification under section 143 of the Act.
- (2) If a supplier who supplies a hazardous substance to a workplace has not supplied that workplace with the hazardous substance in the past 5 years, the supply must be treated as the first supply.
- (3) Subclause (1)(c) to (e) do not apply if the supplier has not supplied the hazardous substance to any person in the past 5 years.
- (4) This clause does not apply to a supplier of a hazardous substance if the hazardous substance is a consumer product that is used in the workplace in quantities consistent with household use, and in a manner consistent with household use.



- (5) In this clause **consumer product** means a hazardous substance that is packed or repacked primarily for use by a household consumer or for use in an office and—
- (a) if packed or repacked primarily for use by a household consumer, is packed in a way and in a quantity in which it is intended to be used by the household consumer; and
  - (b) if packed or repacked primarily for use in an office, is packed in a way and in a quantity in which it is intended to be used for office use.

## 7 Format and content of safety data sheets

- (1) For the purposes of clauses 5 and 6, a safety data sheet must—
- (a) contain the information and follow the format prescribed in Schedule 1, including the headings and the order in which headings and information is presented; and
  - (b) state the date it was prepared and, if it has been amended, the date it was last reviewed.
- (2) The information must be in English and be able to be readily comprehended.

## 8 Classification for purpose of information in safety data sheet

A GHS classification may be selected for any purpose in this notice by—

- (a) selecting the equivalent GHS classification for each HSNO classification of a hazardous substance as set out in Schedule 2; or
- (b) using the applicable GHS classification of the substance under the relevant law of a specified jurisdiction (as defined in Clause 9), where an importer, manufacturer or supplier seeks to rely on Clause 9 or 10.

## 9 Alternative compliance for importers and manufacturers

- (1) Subject to subclause (2), an importer or manufacturer must be treated as complying with clause 5, as it relates to clause 7 and Schedule 1 if, at the relevant time, the importer or manufacturer meets any requirements relating to the format and content of safety data sheets under the law that would have applied if the substance were for supply in a specified jurisdiction that is nominated by the importer or manufacturer in accordance with this clause.
- (2) Nothing in this clause—
- (a) affects the requirements in this notice related to sections 1, 2(b)(iii), and 15(a) and (b) of a safety data sheet; or
  - (b) allows the omission of any GHS signal word, hazard statement, or precautionary statement that is required in relation to a class 3.1D substance.
- (3) An importer or manufacturer who seeks to rely on this clause must—
- (a) apply the relevant law of a specified jurisdiction that would apply if the substance were for use in or supply to a workplace in that jurisdiction; and
  - (b) before importing or manufacturing the substance, establish a record that states the importer or manufacturer's intention to rely on this clause in relation to a relevant jurisdiction that is nominated in the record.
- (4) The importer or manufacturer may nominate a specified jurisdiction by referring directly to the jurisdiction, or by referring to a particular legal instrument in the relevant jurisdiction that has legal force at the relevant time.

- (5) The record must show the dates of each entry and be kept for at least 2 years after the end of the period during which the importer or manufacturer makes the hazardous substance available for supply.
- (6) In this clause—  
**relevant law of a specified jurisdiction** means a law that implements GHS requirements relating to the format and content of safety data sheets to be supplied in workplaces, according to the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> or 6<sup>th</sup> edition of the GHS  
**specified jurisdiction** means:
- (a) the European Union; or
  - (b) the Commonwealth of Australia, including any state or territory of Australia; or
  - (c) Canada, including any province or territory of Canada; or
  - (d) the United States, including any state.

## 10 Alternative compliance for suppliers

- (1) Subject to subclause (2), a supplier must be treated as complying with clause 6, as it relates to Clause 7 and Schedule 1 if, at the time of supply, the safety data sheet that the supplier provides has been obtained or prepared for the hazardous substance by an importer or manufacturer in accordance with Clause 9.
- (2) Nothing in this clause—
- (a) affects the requirements in this notice related to sections 1, 2(b)(iii), and 15(a) and (b) of a safety data sheet; or
  - (b) allows the omission of any GHS signal word, hazard statement, or precautionary statement that is required in relation to a class 3.1D substance.

## 11 Use of emergency information service telephone number

- (1) This clause applies in relation to the requirement for an emergency contact number in Section 1 of a safety data sheet.
- (2) An importer or manufacturer must not obtain, prepare, or supply a safety data sheet for a hazardous substance that provides an emergency contact number of an emergency information service, unless—
- (a) the emergency information service has agreed to the use of the telephone number either directly or through public advertisement of its services; and
  - (b) the importer or manufacturer has supplied the emergency information service with a copy of the latest safety data sheet for the hazardous substance.

## Part C: Transitional provisions

### 12 Definitions for the purpose of this Part

In this Part—

**approval** includes—

- (a) an approval for a hazardous substance issued under Part 5 of the Act; and
- (b) an approval for a hazardous substance or group of hazardous substances deemed to have been given under section 29 by—

- (i) clause 4 of the Hazardous Substances (Fireworks, Safety Ammunition, and Other Explosives Transfer) Regulations 2003; or
- (ii) a notice issued under section 160A of the Act that is in force immediately before the commencement of this notice

**reissued approval** means an approval that was in force immediately before the commencement of this notice that is reissued in accordance with Schedule 7 of the Act

**reissued group standard** means a group standard that is in force immediately before the commencement of this notice that is reissued in accordance with Schedule 7 of the Act

### 13 Transitional period relating to reissued approvals

- (1) A person relying on a reissued approval may, during the transitional period, comply with the controls in the approval related to safety data sheets—
  - (a) according to the terms of the approval as in force immediately before reissue; and
  - (b) as if any relevant regulations that were in force under the Act immediately before the commencement of Schedule 7 of the Act remained in force (whether or not they have been revoked).
- (2) For the purposes of this clause, the transitional period is a period starting on the reissue of the approval and ending on a date prescribed by the Authority in the reissued approval, which must be between 2 and 4 years after the date of reissue.

### 14 Transitional period relating to reissued group standards

- (1) A person relying on a reissued group standard may, during the transitional period, comply with the controls in the group standard related to safety data sheets according to the terms of the group standard as in force immediately before reissue.
- (2) For the purposes of this clause, the transitional period is a period starting on the reissue of the group standard and ending 4 years after the date of reissue.

### 15 Transitional period relating to revoked approvals

- (1) A person relying on a group standard in relation to a hazardous substance formerly covered by an approval that has been revoked under Schedule 7 of the Act may, during the transitional period, comply with the controls in the revoked approval related to safety data sheets—
  - (a) according to the terms of the approval as in force immediately before it was revoked; and
  - (b) as if any relevant regulations that were in force under the Act immediately before the commencement of Schedule 7 of the Act remained in force (whether or not they have been revoked).
- (2) For the purposes of this clause, the transitional period is a period starting on the revocation of the approval and ending on a date prescribed by the Authority in the instrument of revocation, which must be between 2 and 4 years after the date of reissue.

# Schedule 1: Content and format of safety data sheets

## Part A: General requirements

### Section 1: Identification

- (a) a product identifier that clearly identifies the hazardous substance (which may include its common name, chemical name, or registered trade name), and that is the same as the product identifier on the label; and
- (b) recommended uses and any restrictions on use or supply; and
- (c) enough information to enable the New Zealand manufacturer or importer to be contacted. However, for substances imported from overseas directly into a workplace for use (not for re-sale or supply), the name and contact details of the overseas supplier can be provided in place of the New Zealand importer; and
- (d) in the case of a class 1, class 5, class 6.1, 6.3, 6.4, 6.5, class 8.2, or 8.3 substance, a 24 hour freephone emergency contact phone number; and
- (e) in the case of a hazardous substance not referred to in paragraph (d), a freephone emergency contact phone number and the hours of availability, if these are restricted.

### Section 2: Hazard identification

- (a) the classification of the substance (or a GHS classification selected in accordance with clause 8); and
- (b) hazard information, including,—
  - (i) in relation to a hazardous substance that has an equivalent GHS classification set out in Schedule 2, the GHS signal word, GHS hazard statements and GHS precautionary statements in relation to relevant hazard properties; and
  - (ii) in relation to desensitised explosives (class 3.2 and 4.1.3 substances) the signal word, and hazard and precautionary statements that are required on the label in relation to clause 14 of the Hazardous Substances (Labelling) Notice 2017; and
  - (iii) in relation to a class 9 substance, any hazard and precautionary information that is required on the label in relation to clauses 19 to 22 and 24 of the Hazardous Substances (Labelling) Notice 2017; and
  - (iv) information about other hazards that do not give rise to a classification (for example, “releases toxic gas when wet”).

### Section 3: Composition/information on ingredients

- (a) in the case of single ingredient hazardous substances, their chemical identity, including common names and synonyms, CAS number and any impurities and stabilising additives that are themselves hazardous and which contribute to the classification of the substance.
- (b) in the case of hazardous substances that are mixtures, if a toxic, corrosive, or ecotoxic ingredient is present at a concentration that would cause the mixture to be classified in

any of the classifications referred to in column 1 of the table in Part B of this Schedule, and is present at or above the relevant cut-off concentration shown in the corresponding row in column 2 of that table:

- (i) the chemical identify of the ingredient or, as an alternative, the generic name of an ingredient if —
  - (A) the ingredient causes the correct classification of the hazardous substance to include a hazard classification as a class 6.1D, 6.1E (aspiration hazard), 6.1E (respiratory tract irritant), 6.3A, 6.4A, or 6.9B (narcotic effects) substance; and
  - (B) the ingredient does not cause the correct classification of the hazardous substance to include any hazard classification other than those referred to in subparagraph (A); and
  - (C) the identity of the ingredient is confidential information; and
  - (D) a prescribed exposure standard (as defined in the Health and Safety at Work (Hazardous Substances) Regulations 2017) has not been established; and
- (ii) the CAS number of the ingredient; and
- (iii) the concentration of the ingredient expressed as the exact proportion of the ingredient (as a percentage by weight or volume), unless that is confidential information, in which case the concentration may be expressed as one of the following ranges within which the exact proportion fits, expressed as a percentage by weight or volume:
  - (A) < 10%:
  - (B) 10 – 30%:
  - (C) 30 – 60%:
  - (D) > 60%:
  - (E) a range that is narrower than the range set out in subparagraph (A), (B), (C) or (D).

#### **Section 4: First-aid measures**

- (a) first aid instructions according to each relevant route of exposure; and
- (b) whether medical attention is required, and its urgency; and
- (c) information on the most important symptoms and effects, acute and delayed, from exposure.

#### **Section 5: Fire-fighting measures**

- (a) information on the appropriate type of extinguishers or fire-fighting agents, including extinguishers that may not be appropriate for a particular situation; and
- (b) any advice on specific hazards that may arise from the substance, including the nature of combustion products; and
- (c) special protective equipment and precautions for fire-fighters.

**Section 6: Accidental release measures**

- (a) personal precautions, protective equipment, and emergency procedures; and
- (b) any environmental precautions from accidental spills and release; and
- (c) advice on how to contain and clean up a spill or release.

**Section 7: Handling and storage**

- (a) precautions for safe handling; and
- (b) conditions for safe storage, including any incompatibilities.

**Section 8: Exposure controls/personal protection**

- (a) occupational exposure limits (including biological limit values) set for the substance or any of its ingredients, or in their absence, relevant overseas exposure limits; and
- (b) engineering controls; and
- (c) identification of the specific types of personal protective equipment needed to minimise the potential for illness or injury due to exposure to the substance, based on the hazards of the substance and the potential for contact.

**Section 9: Physical and chemical properties**

- (a) a description of the following physical and chemical properties of the substance, including units of measurement and reference conditions where appropriate (if relevant for the interpretation of data reported, the method of determination should also be provided):
  - (i) appearance (physical state, colour, etc.):
  - (ii) odour:
  - (iii) odour threshold:
  - (iv) pH:
  - (v) melting point/freezing point:
  - (vi) initial boiling point and boiling range:
  - (vii) flash point:
  - (viii) flammability (solid, gas):
  - (ix) upper/lower flammability or explosive limits:
  - (x) vapour pressure:
  - (xi) vapour density:
  - (xii) relative density:
  - (xiii) solubility (ies):
  - (xiv) partition coefficient: n-octanol/water:
  - (xv) auto-ignition temperature:
  - (xvi) decomposition temperature:
  - (xvii) kinematic viscosity.
- (b) if specific properties do not apply, the property must still be listed on the safety data sheet with a statement that the property does not apply.

### Section 10: Stability and reactivity

- (a) an indication of the chemical reactivity and chemical stability of the substance under normal and anticipated storage and handling conditions; and
- (b) a list of conditions to avoid or prevent a hazardous situation; and
- (c) information on incompatible substances or materials; and
- (d) information on hazardous decomposition products.

### Section 11: Toxicological information

- (a) Toxicological information should be provided for the following hazardous properties:
  - (i) acute toxicity (6.1A, 6.1B, 6.1C, 6.1D):
  - (ii) aspiration hazard (6.1E (aspiration hazard)):
  - (iii) respiratory irritation (6.1E (respiratory irritant)):
  - (iv) skin corrosion/irritation (8.2A, 8.2B, 8.2C, 6.3A):
  - (v) serious eye damage/irritation (8.3A, 6.4A):
  - (vi) respiratory or skin sensitisation (6.5A, 6.5B):
  - (vii) germ cell mutagenicity (6.6A, 6.6B):
  - (viii) carcinogenicity (6.7A, 6.7B):
  - (ix) reproductive toxicity (6.8A, 6.8B, 6.8C):
  - (x) specific organ toxicity (repeated and single exposure) (6.9A, 6.9B):
  - (xi) narcotic effects (6.9B (narcotic effects)).
- (b) If information for any of the hazardous properties related to these hazard classifications is not available, the hazardous property must still be listed on the safety data sheet with a statement that the information is not available.
- (c) If information is available that demonstrates that the substance is not classified for the hazardous property, this should be stated.
- (d) The toxicological information that must be provided is:
  - (i) a full description of the toxicological (health) effects, including the symptoms or signs of injury or ill health associated with each likely route of exposure, including delayed and immediate effects and also chronic effects from short and long-term exposure; and
  - (ii) the dose, concentration or conditions of exposure likely to cause injury or ill health; and
  - (iii) a summary of the data used to identify the health effects.

### Section 12: Ecological information

- (a) The basic properties for which data must be provided are:
  - (i) ecotoxicity (aquatic and terrestrial); and
  - (ii) persistence and degradability; and
  - (iii) the potential to be bioaccumulative (as defined in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017); and

- (iv) mobility in soil; and
  - (v) other adverse effects.
- (b) If data for any of these properties are not available, the property must still be listed on the safety data sheet with a statement that data are not available. If data are available that demonstrates that the substance is not classified for that property, this should be stated.
- (c) Information on bioaccumulation, persistence and degradability must be given, where available and appropriate, for each relevant component in the mixture.

### **Section 13: Disposal considerations**

- (a) appropriate and achievable disposal methods, including disposal of packaging, that are consistent with the Hazardous Substances (Disposal) Notice 2017 and the Act; and
- (b) special precautions to be taken during disposal; and
- (c) any method of disposal that should not be used.

### **Section 14: Transport information**

If applicable,—

- (a) the UN number; and
- (b) the UN proper shipping name; and
- (c) the UN dangerous goods class and subsidiary risk; and
- (d) the UN Packing Group; and
- (e) environmental hazards (e.g. Marine Pollutant); and
- (f) special precautions when transporting the substance.

### **Section 15: Regulatory information**

- (a) HSNO approval number and, if applicable, the relevant group standard title; and
- (b) reference to any applicable tolerable exposure limit or environmental exposure limit; and
- (c) reference to relevant regulatory requirements not provided elsewhere in the safety data sheet, including but not limited to,—
  - (i) certified handler, tracking and controlled substance licence requirements under the Health and Safety at Work Act 2015;
  - (ii) whether the Agricultural Compounds and Veterinary Medicines Act 1997 applies to the substance;
  - (iii) whether the substance is covered by international agreements such as the Montreal Protocol, the Stockholm Convention or Rotterdam Convention.

### **Section 16: Other information**

- (a) date of preparation or review of the safety data sheet; and
- (b) a key or legend to abbreviations and acronyms used.



## Part B: Concentration cut-offs for ingredients in mixtures for purpose of section 3

**Table: Concentration cut-off levels requiring disclosure of ingredients in mixtures**

Column 1 Classification of ingredient	Column 2 Concentration cut-off level $\geq$ %
6.1A, 6.1B, 6.1C, 6.1D	The value is the concentration that triggers the classification independently of any other ingredient.
6.1E (aspiration hazard)	10 The mixture must meet the viscosity criteria for a GHS category 1 aspiration hazard substance. The identification requirement also applies if the mixture separates into two or more layers, one of which contains >10% of a GHS category 1 aspiration hazard substance and meets the viscosity criteria for GHS category 1.
6.1E (respiratory tract irritant)	The value is the concentration of the ingredient at or above which, in the opinion of an expert, there is data indicating evidence that the mixture is a respiratory tract irritant in humans.
6.3A	10
8.3A	1.0 Below 3% the substance would be classified as 6.4A and so the ingredient requires identification.
6.4A	10
6.5A	0.1 Where a sensitiser elicits a response at levels below this cut-off concentration, the cut-off value is the level at which a response is elicited.
6.5B	0.1 Where a sensitiser elicits a response at levels below this cut-off concentration, the cut-off value is the level at which a response is elicited.
6.6A	0.1
6.6B	1.0
6.7A	0.1

Column 1 Classification of ingredient	Column 2 Concentration cut-off level $\geq$ %
6.7B	0.1
6.8A	0.1
6.8B	0.1
6.8C	0.1
6.9A	1.0
6.9B, if specific organ toxicity	1.0
6.9B (narcotic effects)	The value is the concentration of the ingredient at or above which, in the opinion of an expert, there is data indicating evidence that the mixture causes narcotic effects in humans.
8.2A, 8.2B, 8.2C	1.0 Below 5% the substance would be classified as 6.3A and so the ingredient requires identification
9.1A	0.1 The value is the concentration that triggers the classification independently of any other ingredient.
9.1B, 9.1C, 9.1D	1.0 The value is the concentration that triggers the classification independently of any other ingredient.

## Schedule 2: Equivalent classifications in GHS

- (1) The equivalent GHS classification for a HSNO classification is the GHS class together with the GHS category shown in the corresponding row of the following table.
- (2) Where a HSNO classification appears in a row but there are no items in columns 2 and 3, then there is no equivalent GHS classification for the HSNO classification.
- (3) Where a GHS class and category appear in a row but there is no item in column 1, then there is no equivalent HSNO classification for the GHS class and category.

**Table: Equivalent classifications in GHS**

Physical hazards		
Column 1	Column 2	Column 3
HSNO classification	Equivalent GHS Class	Equivalent GHS category
	Explosives	Unstable explosives
1.1 (A, B, C, D, E, F, G, J, L)	Explosives	Division 1.1
1.2 (B, C, D, E, F, G, H, J, K, L)	Explosives	Division 1.2
1.3 (C, F, G, H, J, K, L)	Explosives	Division 1.3
1.4 (B, C, D, E, F, G, S)	Explosives	Division 1.4
1.5 (D)	Explosives	Division 1.5
1.6 (N)	Explosives	Division 1.6
2.1.1A	Flammable gases (including chemically unstable gases)	Flammable gas category 1
2.1.1B	Flammable gases (including chemically unstable gases)	Flammable gas category 2
	Flammable gases (including chemically unstable gases)	Chemically unstable gas category A
	Flammable gases (including chemically unstable gases)	Chemically unstable gas category B
2.1.2A (flammable aerosols)	Aerosols (flammable)	Category 1
	Aerosols (flammable)	Category 2
	Aerosols (non-flammable)	Category 3
Compressed gases	Gases under pressure	Compressed gas
		Liquefied gas
		Refrigerated liquefied gas

Physical hazards		
Column 1	Column 2	Column 3
HSNO classification	Equivalent GHS Class	Equivalent GHS category
		Dissolved gas
3.1A	Flammable liquids	Category 1
3.1B	Flammable liquids	Category 2
3.1C	Flammable liquids	Category 3
3.1D	Flammable liquids	Category 4
3.2A <sup>1</sup>		
3.2B <sup>1</sup>		
3.2C <sup>1</sup>		
4.1.1A	Flammable solids	Category 1
4.1.1B	Flammable solids	Category 2
4.1.2A	Self-reactive substances and mixtures	Type A
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
4.1.2G	Self-reactive substances and mixtures	Type G
4.1.3A <sup>2</sup>		
4.1.3B <sup>2</sup>		

<sup>1</sup> Liquid desensitised explosives

<sup>2</sup> Solid desensitised explosives

Physical hazards		
Column 1	Column 2	Column 3
HSNO classification	Equivalent GHS Class	Equivalent GHS category
4.1.3C <sup>2</sup>		
4.2A	Pyrophoric liquids	Category 1
4.2A	Pyrophoric solids	Category 1
4.2B	Self-heating substances and mixtures	Category 1
4.2C	Self-heating substances and mixtures	Category 2
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
5.1.1A	Oxidizing liquids	Category 1
	Oxidizing solids	Category 1
5.1.1B	Oxidizing liquids	Category 2
	Oxidizing solids	Category 2
5.1.1C	Oxidizing liquids	Category 3
	Oxidizing solids	Category 3
5.1.2A	Oxidizing gases	Category 1
5.2A	Organic peroxides	Type A
5.2B	Organic peroxides	Type B
5.2C	Organic peroxides	Type C
5.2D	Organic peroxides	Type D
5.2E	Organic peroxides	Type E
5.2F	Organic peroxides	Type F

Physical hazards		
Column 1	Column 2	Column 3
HSNO classification	Equivalent GHS Class	Equivalent GHS category
5.2G	Organic peroxides	Type G
8.1A	Corrosive to metals	Category 1

Health hazards		
Column 1	Column 2	Column 3
HSNO classification	Equivalent GHS Class	Equivalent GHS Category
6.1A	Acute toxicity: oral	Category 1
	Acute toxicity: skin	Category 1
	Acute toxicity: inhalation	Category 1
6.1B	Acute toxicity: oral	Category 2
	Acute toxicity: skin	Category 2
	Acute toxicity: inhalation	Category 2
6.1C	Acute toxicity: oral	Category 3
	Acute toxicity: skin	Category 3
	Acute toxicity: inhalation	Category 3
6.1D	Acute toxicity: oral	Category 4
	Acute toxicity: skin	Category 4
	Acute toxicity: inhalation	Category 4
6.1E	Acute toxicity: oral	Category 5
	Acute toxicity: skin	Category 5
	Acute toxicity: inhalation	Category 5
6.1E (aspiration hazard)	Aspiration hazard	Category 1
6.1E (respiratory tract irritant)	Specific target organ toxicity (single exposure)	Category 3
8.2A	Skin corrosion/irritation	Category 1A
8.2B	Skin corrosion/irritation	Category 1B
8.2C	Skin corrosion/irritation	Category 1C
6.3A	Skin corrosion/irritation	Category 2
6.3B	Skin corrosion/irritation	Category 3

<b>Health hazards</b>		
<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>
<b>HSNO classification</b>	<b>Equivalent GHS Class</b>	<b>Equivalent GHS Category</b>
8.3A	Serious eye damage/eye irritation	Category 1
6.4A	Serious eye damage/eye irritation	Category 2
6.5A	Respiratory sensitization	Category 1
6.5B	Skin sensitization	Category 1
6.6A	Germ cell mutagenicity	Category 1
6.6B	Germ cell mutagenicity	Category 2
6.7A	Carcinogenicity	Category 1
6.7B	Carcinogenicity	Category 2
6.8A	Reproductive toxicity	Category 1
6.8B	Reproductive toxicity	Category 2
6.8C	Reproductive toxicity	Effects on or via lactation
6.9A	Specific target organ toxicity (single exposure)	Category 1
	Specific target organ toxicity (repeated exposure)	Category 1
6.9B	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

Environmental hazards		
Column 1	Column 2	Column 3
HSNO classification	Equivalent GHS Class	Equivalent GHS Category
9.1A	Aquatic toxicity (acute)	Category 1
9.1A	Aquatic toxicity (chronic)	Category 1
9.1B	Aquatic toxicity (chronic)	Category 2
9.1C	Aquatic toxicity (chronic)	Category 3
9.1D	Aquatic toxicity (acute)	Category 2
	Aquatic toxicity (acute)	Category 3
	Aquatic toxicity (chronic)	Category 4
9.2A – 9.2D		
9.3A – 9.3C		
9.4A – 9.4C		





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