



HS429 Labelling of Hazardous Chemicals Guideline

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1. Scope

This guideline applies to staff and students at UNSW who use or store chemicals, as well as those who supervise these activities. It applies both on and off UNSW campus sites.

2. General Guidance on Labelling

Overall responsibility for ensuring legally compliant labels on containers of hazardous chemicals rests with chemical manufacturers, suppliers and importers (clause 335 of WHS Regulation). Specifications are outlined in Schedule 9 of WHS Regulation: Part 3: Correct Labelling and summarized in 3.1 below. UNSW staff and students are expected to comply with these specifications as well to ensure labelling consistency, making chemical hazards easily identifiable and contributing towards a safe workplace. Central Safety can be contacted at safety@unsw.edu.au for further information or guidance.

All new chemicals purchased at MUST have a GHS compliant label. Any legacy chemicals which were already labelled in accordance with previous regulations (National Occupational Health and Safety Commission - NOHSC) do not require re-labelling. Any legacy chemicals which **do not** have an NOHSC compliant label must either be disposed of OR stored in a separate locked storage facility until re-labelled.

A label must be prepared according to the directions laid out in the relevant section of this document if:

- the original supplier label is not on the container
- if the contents differ from that shown on the original label.

This applies to:

- decanted research samples
- chemical waste
- custom solutions (e.g. HPLC mobile phases, salt solutions, diluted acids).
- decanted reagents and liquids.

These labelling requirements do not apply to consumer products that are also hazardous chemicals if:

- they are used in the workplace in a quantity and way that is consistent with household use (e.g., dishwashing detergent), and
- incidental to the work being undertaken.

2.1. Information required on a Label – Manufacturer's/Importer's responsibility

The following information must be included on a label for it to be GHS compliant:

- Product identifier:
 - Full name
 - UN number
 - CAS number (as applicable).
- Australian Manufacturer or importer details:
 - Name
 - Address in Australia
 - Telephone number.
- The chemical identity and proportion as a percentage (%) of each ingredient present
- Hazard Class and Hazard Category as per GHS Classification
- Hazard Pictogram consistent with above classification
- Signal word
- Hazard Statements
- Precautionary Statements
- Any other information necessary to convey the hazards and precautions that haven't already been stated e.g., first aid and emergency procedures
- The expiry date (if applicable).

This information and additional details can all be found in the Australian Safety Data Sheets (SDS) for a chemical.



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An SDS follows a standardised format, which includes the following sections:

- *Section 1 – Identification: product identifier and chemical identity*
- *Section 2 – Hazard(s) identification*
- *Section 3 – Composition and information on ingredients*
- *Section 4 – First aid measures*
- *Section 5 – Firefighting measures*
- *Section 6 – Accidental release measures*
- *Section 7– Handling and storage, including how the chemical may be safely used*
- *Section 8 – Exposure controls and personal protection*
- *Section 9 – Physical and chemical properties*
- *Section 10 – Stability and reactivity*
- *Section 11 – Toxicological information*
- *Section 12 – Ecological information*
- *Section 13 – Disposal considerations*
- *Section 14 – Transport information*
- *Section 15 – Regulatory information*
- *Section 16 – Any other relevant information*



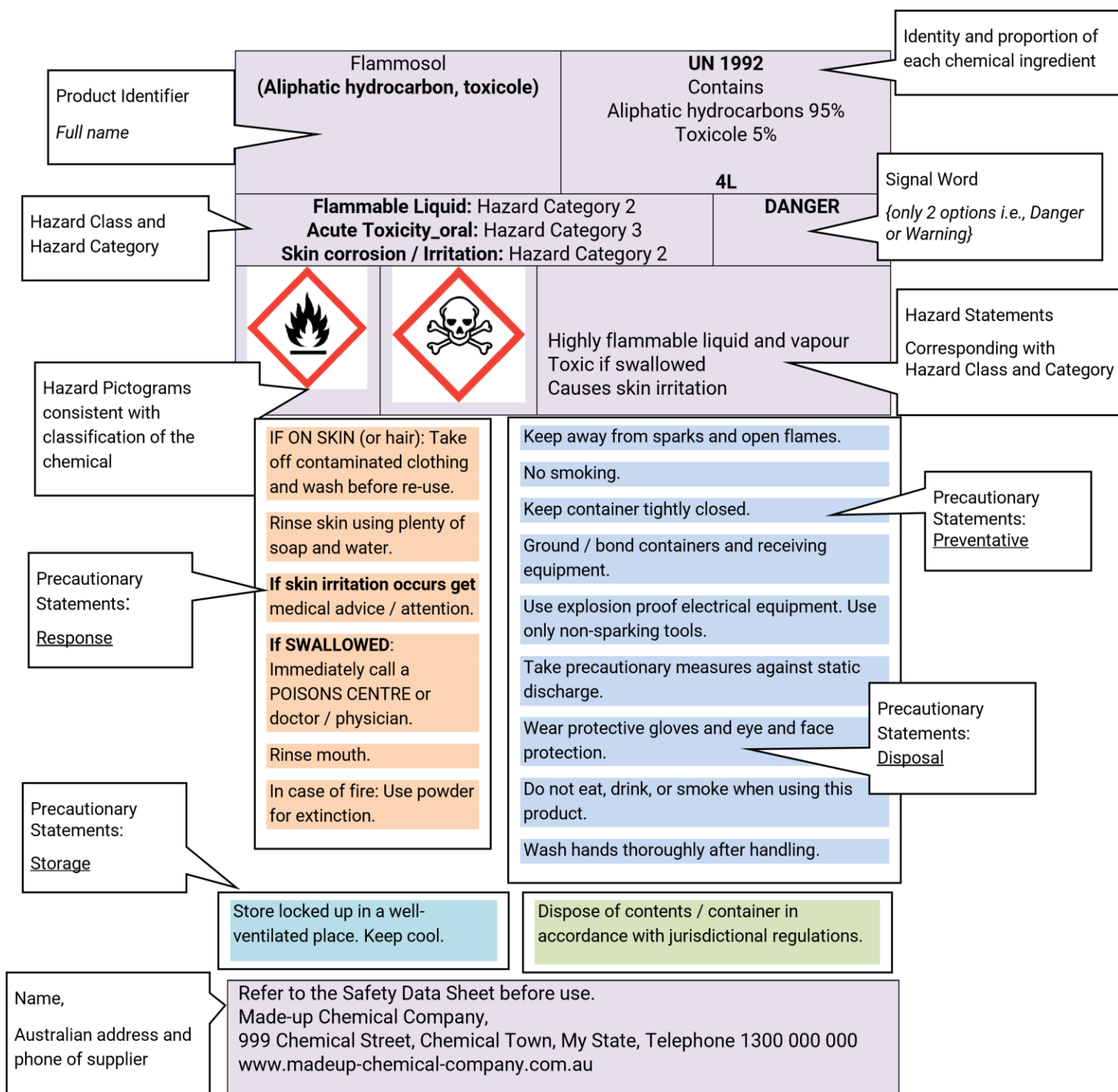


Figure 1: Example of a GHS compliant label - Remodelled from the model Code of Practice (COP)

AMBER
CHEMALERT REPORT
GHS Classification Summary Report

IDENTIFICATION

PRODUCT NAME **METHANOL**

Supplier name **MERCK PTY LIMITED**

Address **207 Colchester Road, Killyth, VICTORIA, Australia, 3137**

Phone Number **1800 335 571, (03) 9728 7600** Emergency Number **(03) 9728 7600 or 1800 127 406 (A/hr)**

HAZARDOUS INGREDIENTS

Ingredient name	CAS number	Content
METHANOL	67-56-1	100%

HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Classification Acute Toxicity: Inhalation: Category 3
 Acute Toxicity: Oral: Category 3
 Acute Toxicity: Skin: Category 3
 Flammable Liquids: Category 2
 Specific Target Organ Systemic Toxicity (Single Exposure): Category 1

DANGER

Hazard Highly flammable liquid and vapour.
 Toxic if swallowed.
 Toxic in contact with skin.
 Toxic if inhaled.
 Causes damage to organs.

Figure 2: Example of a 'GHS format' label downloaded from ChemAlert

Labels, such as the methanol example above, can be download from ChemAlert. Staff and students are not expected to create their own custom labels for every container. For example, decanted volumes from a stock/bulk container that are put into a smaller container for everyday use can have a ChemAlert label applied to them.

2.2. Label Elements

Information regarding each of the sections below can be found on the [GHS Classification \(Rev.10, 2023\) Summary](#) on PubChem. PubChem is an open chemistry database owned and operated by the National Institute of Health (NIH) in the United States of America (USA).

2.2.1. Signal Word

There are only 2 possibilities for Signal Words:

DANGER or WARNING depending on the classification of the chemical.

Only one signal word should be on any one label. For example, if the signal word 'Danger' applies, then the signal word 'Warning' should be omitted.

2.2.2. Hazard statements

A unique hazard statement:

- is assigned to each hazard class and category
- describes the nature of a hazard, including the degree of hazard, where appropriate.

All relevant hazard statements must appear on the label except where

- the statement duplicates or conflicts with another statement or other hazard information that is required
- the omission of the statement would not decrease the level of protection or information in relation to the hazard. Refer Section 3.5.

2.2.3. Precautionary statements

Precautionary statements describe the recommended measures that should be taken to prevent or minimise adverse effects. Each hazard class and category have a corresponding set of associated precautionary statements.

Precautionary statements are separated into the following categories:

PREVENTION STATEMENTS Actions to prevent an accident or exposure e.g., Avoid breathing fumes	RESPONSE STATEMENTS Actions to take following exposure e.g., Rinse skin with water
STORAGE STATEMENTS Instructions for safe storage e.g., Store in a well-ventilated place	DISPOSAL STATEMENTS How to dispose of the chemical e.g., Dispose in accordance with local regulations

Not all precautionary statements relating to a particular hazard classification need to be included on the label. This is provided leaving the statement out does not:

- decrease the level of protection
- change/decrease the information required to minimise the risk.

For example, it may be acceptable to leave out a precautionary statement where Personal Protective Equipment (PPE) applies to different hazard categories for the same hazardous chemical. If the precautionary statements 'Wear face protection' and 'Wear gloves and face protection' are specified, then only the latter statement should appear on the label as it relates to the more stringent protective measures.

As a guide, a maximum of between six and ten precautionary statements should appear on the label, depending on the nature and severity of the hazards.

2.2.4. Hazard pictograms

There are 9 GHS hazard pictograms with associated hazard classes and categories. These can be found on the SafeWork Australia website. All Hazard pictograms that match the chemical's classification must be displayed on the label, unless the rules of precedence apply. Refer: Section 2.4 Duplication or Redundancy and the Rules of Precedence.



GHS01—Exploding bomb

Explosion, fire, blast or projection hazard.



GHS02—Flame

Flammable liquids, vapour, solids and gases; including self-heating and self-igniting substances.



GHS03—Flame over circle

Oxidising liquids, solids and gases, may cause or intensify fire.



GHS04—Gas cylinder

Gases under pressure.



GHS05—Corrosion

Corrosive chemicals, may cause severe skin and eye damage and may be corrosive to metals



GHS06—Skull and crossbones

Fatal or toxic if swallowed, inhaled or in contact with skin.



GHS07—Exclamation mark

Low level toxicity. This includes respiratory, skin, and eye irritation, skin sensitisers and chemicals harmful if swallowed, inhaled or in contact with skin.



GHS08—Health *Hazard*

Chronic health hazards; this includes aspiratory and respiratory hazards, carcinogenicity, mutagenicity and reproductive toxicity.



GHS09—Environment

Hazardous to aquatic life and the environment.

Figure 3: The 9 GHS pictograms for hazards as found at [Using the GHS | Safe Work Australia](#).

2.2.5. Expiry Date

The expiry date for a chemical must be stated if the chemical could become unstable over time and pose additional risks. Refer to the relevant UNSW document for further details on expiry dates (e.g. HS622 Organic Peroxide Forming Chemicals).

2.3. Mixtures made up in laboratories

For mixtures made up in laboratories, the following must be listed on the label:

- The identity of all hazardous ingredients in a mixture
- The proportion of the ingredients, expressed as a weight or volume percentage, of the overall mixture.

Hazardous ingredients should be listed in descending order by mass or volume. Where ingredient proportions are commercially confidential, the following ranges should be used as an alternative:

- <10%
- 10- <30%
- 30 – 60%
- >60%.

Where possible, the percentage composition should add up to or indicate a total of 100%, even if an estimate of non-hazardous ingredients needs to be provided.

If the ingredient is present at a concentration below the cut-off point for the chemical, then its details can be added to the % of non-hazardous ingredients.

2.4. Duplication or Redundancy and the Rules of Precedence

Duplication or redundancy of label elements may occur where a hazardous chemical meets the criteria for more than one hazard class or category. Duplication of an element may occur where:

- a specific precautionary statement applies to several hazard categories into which a particular chemical is classified
- an element may become redundant because a more stringent control applies to another hazard category (for example, the type of PPE required).

Duplicate or redundant information should not be included on a label.

When a hazardous chemical meets the criteria for more than one hazard class or category (e.g., it is flammable and toxic), the potential exists for duplication or redundancy of certain label elements. Information should not be duplicated.

The following rules of precedence will apply for the use of hazard pictograms on a label:

- Where a dangerous goods class diamond is required on the container to meet transport regulations, the equivalent hazard pictogram, as specified in the GHS, should not appear.
- If the skull and crossbones hazard pictogram apply, the exclamation mark hazard pictogram should not appear.
- If the corrosive hazard pictogram applies, the exclamation mark hazard pictogram should not appear if it is used to communicate skin or eye irritation.
- If the health hazard pictogram appears for respiratory sensitization, the exclamation mark hazard pictogram should not appear if it is used to communicate skin sensitisation, or for skin or eye irritation.

See more information in Appendix E of the SafeWork Australia Code of Practice for Labelling.

3. Circumstances Where Reduced Labelling Requirements May Apply

Under the WHS Regulations, reduced labelling is permitted for hazardous chemicals that are:

- supplied in small containers
- research chemicals or samples for analysis
- decanted or transferred
- not supplied to another workplace, and where the hazards are known to the workers using the chemical
- hazardous waste (Refer: HS321 Laboratory Hazardous Waste Disposal Guideline for specific waste labelling requirements)
- classified into the explosives hazard class and are not explosive articles.



3.1. Small Containers

If hazardous chemicals are in containers too small to attach a complete label, the following must be included on the label:

- Product identifier.
- Manufacturer or Importer details:
 - Name
 - Australian address
 - Business telephone number
- A hazard pictogram or hazard statement that is consistent with the correct classification of the chemical
- As much information required for hazardous chemical labels that is reasonably practicable to included. Information about the chemicals most significant hazards must be included.

The most significant hazard will vary for each chemical. It may depend on its physical form or how it will be used. For example:

- Information about inhalation risks may be considered more significant for paint to be applied by a spray gun rather than brush.
- information relating to dermal toxicity may be considered more significant for a chemical packaged in an ampoule (where spillage could occur) than in a ready-to-use syringe.

For hazardous chemicals with multiple hazard categories, the most stringent set of precautionary statements must be selected. This is appropriate for situations where a quick response is needed after an accidental exposure. Information relating to these actions must be included in preference to non-critical information.

Where certain hazard or other information has been removed from the label, the complete set of hazards and information should be included on:

- an outer box (for example for a box containing several very small ampoules)
- a swing tag or insert
- a leaflet inside a box.

3.2. Research chemicals or samples for analysis

If a hazardous chemical is used for research purposes only or is a sample for analysis, the label must:

- be written in English
- include the product identifier
- include a hazard pictogram or hazard statement for the classification of the chemical.

The product identifier can be:

- the name of the chemical
- a recognised abbreviation or acronym
- a chemical formula
- a chemical structure
- reaction components.

Labels for research chemicals or samples for analysis must include as much hazard information as possible, based on the identity and the known or suspected hazards. It must be indicated on the label when a research chemical or sample for analysis cannot be identified.

If it is not practical to label a research container due to its size or the conditions under which it is used, the information can be provided on a:

- secure swing tag
- sign attached to supporting apparatus
- label on an outer container.

For example, rather than label individual test tubes containing the same hazardous chemical, a label can be attached to the rack using a swing tag.



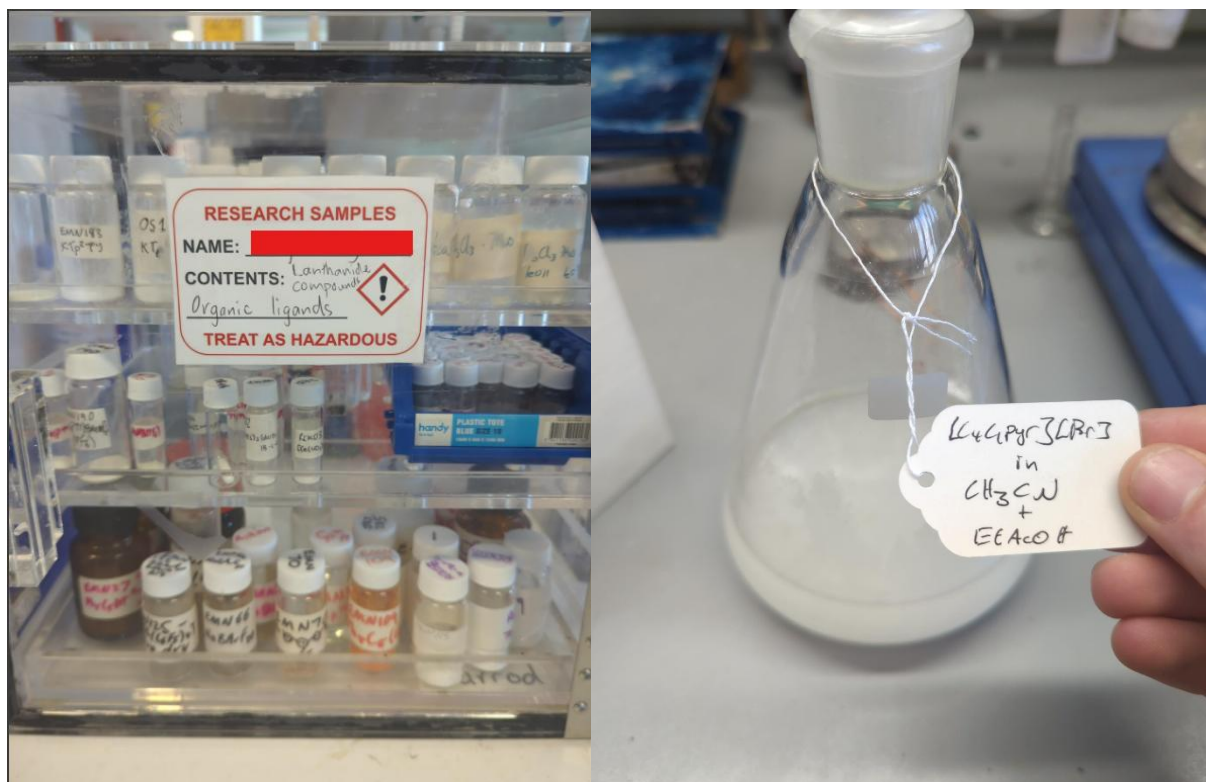


Figure 4. Examples of labelled research samples

3.3. Decanted or transferred hazardous chemicals

If a hazardous chemical has been decanted or transferred from its original container and it will not be used immediately or it will be given to someone else, the label must

- be written in English
- include the product identifier
- include a hazard pictogram or hazard statement consistent with the correct classification of the chemical.

In this context, decant means to transfer a hazardous chemical from a correctly labelled container to another container within a workplace. The container may range in size and purpose. For example, it may be a

- small flask in a research laboratory
- large vessel used to hold reaction components prior to use in a mixing or reaction process.

Labelling is not required when the entire amount of a decanted hazardous chemical will be used immediately.

A decanted hazardous chemical is considered to be “used immediately” if:

- it is not left unattended by the person who decanted it
- the decanted hazardous chemical is used only by the person present at the decanting process
- the container is thoroughly cleaned of any hazardous chemical immediately after use, ensuring it is in the condition as if it had never contained the chemical.

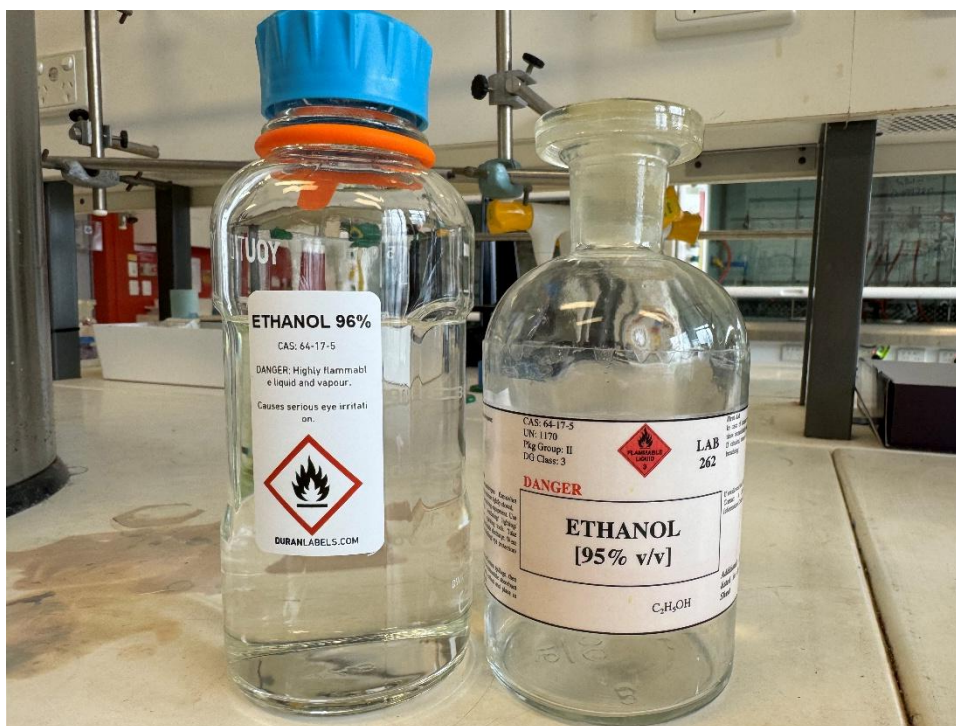


Figure 5. Example labels of decanted hazardous chemicals in School of Chemistry

3.4. Hazardous chemicals with known hazards that are not supplied to another workplace

If a hazardous chemical is not being supplied to another workplace and the hazards are known to the workers using, handling or storing the chemical, the label must:

- be written in English
- include the product identifier
- include a hazard pictogram or hazard statement that is consistent with the correct classification of the chemical.

The reason for fewer labelling requirements is that the workers handling the chemical are aware of its hazards. However, the label still needs to provide enough information to ensure safe use.

3.5. Hazardous waste products

Labels for hazardous wastes should provide as much hazard information as reasonably practicable, based on what is known about the identity and any suspected hazards. Where possible, the label of any hazardous waste should also detail the following information:

- The identity of any known or likely hazardous constituents or impurities and their proportions (for example, 'contains chromium VI, 5%', or 'may contain trace levels of organic peroxides').
- Relevant precautionary statements.
- Relevant first aid and safety directions.
- Any other information that may assist identification of the hazardous waste and its associated hazards.

Hazardous waste products must be identified and correctly classified, so far as is reasonably practicable. Where it is not reasonably practicable to undertake a complete hazard classification of waste material, the hazard classification must be determined or estimated using a precautionary approach based on the known or likely constituents of the waste.

In this case the product identifier may be a more generic title. For example,

- chlorinated solvent waste
- flammable waste
- chromium VI waste
- heavy metal waste.

If it is likely that a waste product is a hazardous chemical, then the label on the container of the hazardous waste must be written in English and include the:

- product identifier
- manufacturer or importers details:
 - Name
 - Australian address
 - business telephone number. If the waste was generated in a UNSW laboratory, then waste generator's contact details should be used
- hazard pictogram and hazard statement that is consistent with the correct classification of the chemical.

When disposing of full or partly full containers, keep the contents in the original container to reduce risk and reduce exposure. Containers must be labelled with the owner's details should a spill occur.

If every reasonable attempt has been made to identify and classify the chemical waste but it has been unsuccessful, this must be clearly indicated on the label. The image below, found in the Central Safety Team's [Chemical Waste Label Library](#), shows an example label with the required fields:

Name of waste stream Primary risk	HAZARDOUS WASTE Flammable: Non-Halogenated		UN 1993 DG 3 PG III	UN Number Dangerous Goods Class Packing Group
GHS Pictograms	 <p>• Highly Flammable liquid and vapour. • Toxic if swallowed, in contact with skin or if inhaled. • Causes severe skin burns and eye damage. • Causes damage to organs through prolonged or repeated exposure. • Toxic to aquatic life with long lasting effects.</p> <p>IF SWALLOWED: Immediately call a POISON CENTRE/doctor. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.</p> <p>• Keep away from heat/sparks/open flames/hot surfaces. — No smoking. • Keep container tightly closed. • Avoid breathing dust / fume / gas / mist / vapours / spray. • Wear protective gloves/eye protection/face protection. • Avoid release to the environment.</p>		Hazard Statements Response Statements Precautionary Statements	
Product identifier (as far as reasonably practicable)	Contains: Mixed aliphatic and aromatic hydrocarbons, alcohols and derivatives (≥90%) (e.g. acetone, ethanol, methanol, ether, pentane, propanol, acetonitrile, benzene, hexane, etc.)		School: _____ Building: _____ Room: _____ Contact: _____ Date generated: _____ THE UNIVERSITY OF NEW SOUTH WALES Sydney, NSW 2052 Phone: 9385 4695 <small>(CHEMSCI-WL-FLAMM_NONHALO-v1.0, 2019-10)</small>	
			Contact Details of the waste generator	

Figure 6: Hazardous Waste, Flammable: Non Halogenated label

Access can be requested to this library by contacting the Central Safety Team at safetysystems@unsw.edu.au.

3.6. Explosives, dangerous goods for transport or Nanomaterials:

Refer to Section 3.7, 3.8 and 3.11 of the Code of Practice (COP) [Labelling of Workplace Hazardous Chemicals](#) for

- hazardous chemicals classified in the explosives hazard class
- hazardous chemicals that are dangerous goods packaged for transport
- products containing nanomaterials.

4. Labelling design and layout

The label must be:

- written in English
- large enough to contain all the relevant information
- easily visible and legible

- appropriate to the size of the container
- firmly secured to the container
- durable enough to remain legible for the lifetime of the chemical in use or storage.

Orientation and size of label elements

The following table is provided as a guide for the minimum dimensions for hazard pictograms and sizes of text on containers of various capacities:

Container capacity	Minimum hazard pictogram dimensions	Minimum text size	Approximate MS Word Font Size
≤ 500 mL	15 x 15 mm	2.5 mm	7
> 500 mL and ≤ 5 L	20 x 20 mm	3 mm	8.5
> 5 L and ≤ 25 L	50 x 50 mm	5 mm	14.2
≥ 25 L	100 x 100 mm	7 mm	20

Refer to the Australian Dangerous Goods Code for marking requirements for dangerous goods being transported.

5. Labelling for Non-Hazardous Chemicals

Some chemicals are classified as non-hazardous because they do not meet any criteria for physical, health or environmental hazards. Additionally, certain chemicals which are initially hazardous have been diluted to levels below the threshold for hazardous classification.

Non-hazardous chemicals labels must include the following information:

- Chemical Name.
- Concentration (if applicable e.g., 0.3% hydrochloric acid).
- Name of person or research group that own the chemical/s.
- The words 'NON-HAZARDOUS' or some other agreed (and communicated to users) code to distinguish.
- The substance as non-hazardous e.g., green sticky dots or a green label.
- Date container was created may also be added.

6. Making up a GHS label for Mixtures

Follow the below procedure to make a GHS label:

1. Get information about each ingredient's hazard classification and GHS category, based on the concentration in the mixture.
2. Use the existing classification for each ingredient (e.g., if the chemical has been classified under the GHS criteria or the ADG criteria)
3. Once the information for each ingredient has been obtained, the rules of precedence can be applied to select the most appropriate hazard pictograms and hazard statements to go onto the label for the mixture. Refer Section 2.4 Duplication or Redundancy and the Rules of Precedence.

6.1. Concentration cut off points

The GHS and WHS Regulations list the ingredient concentration cut offs in the same way as the [SafeWork Australia Hazardous Chemical Information System \(HCIS\)](#).

If a chemical doesn't have a specific concentration cut-off, the generic limits based on its hazard classification can be used. These are found in the GHS (Globally Harmonized System), mainly in:

- Chapter 2: Physical Hazards
- Chapter 3: Health Hazards.

However, in Australia, some of these GHS tables have been replaced by values listed in [Work Health and Safety Regulation 2025 – Schedule 6](#) (NSW)/ [Work Health and Safety Regulation 2011](#) (ACT). These Australian-specific cut-offs must be used instead of the GHS ones.



Appendix B: Classifications of Mixtures – Generic Tables shows generic mixture classification tables. Always follow the WHS Regulation when applying cut-offs locally.

8. Legislative Compliance

- NSW: [Work Health and Safety Regulation 2025](#); [Work Health and Safety Act 2011](#);
- ACT: [Work Health and Safety Regulation 2011](#); [Work Health and Safety Act 2011](#);
- Safe Work Australia [Labelling of Workplace Hazardous Chemicals Code of Practice](#)
- Safe Work Australia [Managing Risks of Hazardous Chemicals in the Workplace](#)
- Safe Work Australia [Preparation of Safety Data Sheets for Hazardous Chemicals](#)
- United Nations [Globally Harmonized System of Classification and Labelling of Chemicals \(GHS Rev. 10, 2023\)](#)

Appendix A: Definitions

Term	Definition
Legacy Chemical	Broadly defined as expired chemicals or those no longer needed/usable for research but remain stored in laboratories (often for years). The chemical and/or physical stability of these chemicals may become compromised over time, leading to the formation of shock sensitive degradation products.
Research Chemical	A substance or mixture that has been manufactured in a laboratory for the purposes of genuine research. It is not for use or supply to others for a purpose other than genuine analysis or research. A chemical that is supplied commercially to another workplace is <u>not included</u> under the meaning of research chemical or samples for analysis under any circumstances.
Hazard Classification	An indication of the intrinsic hazardous properties of substances and mixtures. It involves: <ul style="list-style-type: none"> a) identification of relevant data regarding the hazards of a substance or mixture; b) subsequent review of those data to ascertain the hazards associated with the substance or mixture; and c) a decision on whether the substance or mixture will be classified as a hazardous substance or mixture and the degree of hazard, where appropriate, by comparison of the data with agreed hazard classification criteria.
Cut Off Value	Minimum concentration for a substance to be taken into account for classification purposes(do not necessarily trigger classification).
Concentration Limit	Minimum concentration for a substance to trigger the classification of a mixture for a specific hazard class;
Specific Concentration Limit	A concentration limit that is specific to a substance and takes precedence over generic concentration limit or cut-off value.



Appendix B: Classifications of Mixtures – Generic Tables from the GHS

Refer: United Nations [Globally Harmonized System of Classification and Labelling of Chemicals \(GHS Rev. 10, 2023\)](#)

Table 3.2.3: Concentration of ingredients of a mixture classified as Skin Category 1, 2 or 3 that would trigger classification of the mixture as hazardous to skin (Category 1, 2 or 3)

Summary of ingredients classified as:	Concentration triggering classification of a mixture as:		
	Skin corrosive	Skin Irritant	
	Category 1 (see note below)	Category 2	Category 3
Skin Category 1	≥ 5%	≥ 1% but < 5%	
Skin Category 2		≥ 10%	≥ 1% but < 10%
Skin Category 3			≥ 10%
(10 × skin Category 1) + skin Category 2		> 10 %	≥ 1% but < 10%
(10 × skin Category 1) + skin Category 2 + skin Category 3			> 10 %

Table 3.2.4: Concentration of ingredients of a mixture when the additivity approach does not apply, that would trigger classification of the mixture as hazardous to skin

Ingredient	Concentration	Mixture classified as:
Acid with pH ≤ 2	≥1%	Skin Category 1
Base with pH ≥ 11.5	≥ 1%	Skin Category 1
Other corrosive (Category 1) ingredient	≥1%	Skin Category 1
Other irritant (Category 2/3) ingredients, including acids and bases	≥3%	Skin Category 2

Table 3.3.3: Concentration of ingredients of a mixture classified as Skin Category 1 and/or Eye Category 1 or 2 that would trigger classification of the mixture as hazardous to the eye (Category 1 or 2)

Sum of ingredients classified as:	Concentration triggering classification of a mixture as:	
	Serious eye damage	Eye irritation
	Category 1	Category 2/2A
Eye or Skin Category 1	≥ 3%	≥ 1% but < 3%
Eye Category 2/2A		≥ 10%
10 x (skin Category 1 + eye Category 1)* + eye Category 2		≥ 10%

* If an ingredient is classified as both skin Category 1 and eye Category 1 its concentration is considered only once in the calculation.

Table 3.5.1 Cut- off values/concentration limits of ingredients of a mixture classified as germ cell mutagens that would trigger classification of the mixture

Ingredient classified as:	Cut-off/concentration limits triggering classification of a mixture as:		
	Category 1 mutagen		Category 2 mutagen
	Category 1A	Category 1B	
Category 1A mutagen	≥ 0.1%	--	--
Category 1B mutagen	--	≥ 0.1%	
Category 2 mutagen	--	--	≥ 1.0%

Note: The cut-off values/concentration limits in the table apply to solids and liquids (w/w units) as well as gases (v/v units).



Appendix C - Classification of Mixtures Tables from Schedule 6

Refer: [Work Health and Safety Regulation 2025 - Schedule 6: Classification of mixtures \(NSW\)](#).

The tables below replace the tables in the GHS system for their respective hazard categories

Table 6.1: Classification of mixtures containing respiratory or skin sensitisers

Cut-off values/concentration limits of ingredients of a mixture classified as either a respiratory sensitiser or a skin sensitiser that would trigger classification of the mixture.

Ingredient Classification	Mixture Classification		
	Skin Sensitiser Category 1	Respiratory Sensitiser Category 1	
	All physical states	Solid/Liquid	Gas
Skin Sensitiser Category 1	$\geq 1.0\%$		
Skin Sensitiser Sub-category 1A	$\geq 0.1\%$		
Skin Sensitiser Sub-category 1B	$\geq 1.0\%$		
Respiratory Sensitiser Category 1		$\geq 1.0\%$	$\geq 0.2\%$
Respiratory Sensitiser Sub-category 1A		$\geq 0.1\%$	$\geq 0.1\%$
Respiratory Sensitiser Sub-category 1B		$\geq 1.0\%$	$\geq 0.2\%$

NOTE: Table 6.1 replaces table 3.4.5 in the GHS.

Table 6.2: Classification of mixtures containing carcinogens

Cut-off values/concentration limits of ingredients of a mixture classified as a carcinogen that would trigger classification of the mixture.

Ingredient Classification	Mixture Classification	
	Category 1 Carcinogen	Category 2 Carcinogen
Category 1 Carcinogen	$\geq 0.1\%$	
Category 2 Carcinogen		$\geq 1.0\%$

NOTE 1: The concentration limits in Table 6.2 apply to solids and liquids (w/w units) and gases (v/v units).

NOTE 2: Table 6.2 replaces table 3.6.1 in the GHS.

Table 6.3: Classification of mixtures containing reproductive toxicants

Cut-off values/concentration limits of ingredients of a mixture classified as a reproductive toxicant or for effects on or via lactation that would trigger classification of the mixture.

Ingredient Classification	Mixture Classification		
	Category 1	Category 2	Additional category for effects on or via lactation
	Reproductive Toxic.	Reproductive Toxic.	
	≥ 0.3%		
Category 1 Reproductive Toxicant			
Category 2 Reproductive Toxicant		≥ 3.0%	
Additional category for effects on or via lactation			≥ 0.3%

NOTE 1: The concentration limits in Table 6.3 apply to solids and liquids (w/w units) and gases (v/v units).

NOTE 2: Table 6.3 replaces table 3.7.1 in the GHS.

Table 6.4: Classification of mixtures containing specific target organ toxicants (STOT) single exposure

Ingredient Classification	Mixture Classification	
	Category 1	Category 2
Category 1 STOT Single Exposure	Concentration ≥ 10%	≥1.0% concentration but <10%
Category 2 STOT Single Exposure		Concentration ≥ 10%

NOTE 1: The concentration limits in Table 6.4 apply to solids and liquids (w/w units) and gases (v/v units).

NOTE 2: Table 6.4 replaces table 3.8.2 in the GHS.

Table 6.5: Classification of mixtures containing specific target organ toxicants (STOT) repeated exposure

Cut-off values/concentration limits of ingredients of a mixture classified as a specific target organ toxicant that would trigger classification of the mixture.

Ingredient Classification	Mixture Classification	
	Category 1	Category 2
Category 1 STOT Repeat Exposure	Concentration ≥ 10%	≥1.0% concentration but <10%
Category 2 STOT Repeat Exposure		Concentration ≥ 10%

NOTE 1: The concentration limits in Table 6.5 apply to solids and liquids (w/w units) and gases (v/v units).

NOTE 2: Table 6.5 replaces table 3.9.3 in the GHS.

Appendix D: Version control

Version	Authorised by	Approval Date	Effective Date	Sections modified
0.1	Director, Human Resources	16/12/2010	16/12/2010	New document released for consultation
1.0	Director, Human Resources	16/12/2010	16/12/2010	No changes from consultation process
1.1	Director, Human Resources	16/12/2010	16/12/2010	Update in accordance with University template.
2.0	Director, Human Resources	1/2/2013	1/2/2013	All sections changed due to the incorporation of the GHS system for the labeling of hazardous chemicals being incorporated into the NSW WHS Regulation 2011 Updated Branding Logo in accordance with UNSW Branding Guidelines. Modified the document identifier from OHS to HS in accordance with WHS legislation review
2.1	Director, Human Resources	8/7/2013	8/7/2013	New section added to incorporate requirements for labelling of nonhazardous chemicals (section 6)
2.2	Director, UNSW Safety and Sustainability	30 April 2014	30 April 2014	Reviewed for administrative updates
2.3	Director, UNSW Safety and Sustainability	30 March 2016	30 March 2016	Section 3: Qualify GHS label requirements for legacy chemicals Section 4.5 provide links to chemicals waste label templates
3.0	Director, Risk & Safety Management	8 August 2022	8 August 2022	Reviewed for administrative updates, template updated and removed from Governance
4.0	Deputy Director, Health and Safety	8 October 2025	8 October 2026	Full review for administrative updates, legislative updates.

Any suggestions, recommendations or updates to this document should be emailed to safety@unsw.edu.au.

