



Chemical registers, manifests and safety data sheets in science

Introduction

This information sheet provides guidance regarding the requirements for chemical registers, manifests and safety data sheets (SDSs) in Australian school science areas. It is an updated review of the answers to the following questions, and replaces the previously published Q&As:

- What information must be included in a Chemical Register? Does my school need a manifest?
- Do I need to include household products and non-hazardous chemicals in a chemical register and get the SDS for them?
- Where should the SDSs be located? Do they need to be printed? How often should we update SDSs? Can you clarify the requirement for a manufacturer's SDS versus a third party SDS? What about a SDS for old chemicals when the manufacturer no longer exists?

What is a Chemical Register?

A chemical register is an inventory of all **hazardous** chemicals stored, handled or used at a workplace and accompanied by the relevant and current safety data sheets for each of the chemicals listed. Under the Model Work Health and Safety Regulations¹ the **minimum** information required for a chemical register is:

- the chemical name.
- the SDS sheet for every chemical.

The chemical register must be readily accessible to all staff, who are involved with the handling of hazardous chemicals or likely to be affected by the chemical and be made available in an emergency.^{2,3}

Under Work Health and Safety legislation chemicals that do not need to be added to the register include:

- non-hazardous chemicals
- chemicals in transit
- chemicals that are stored, unopened on the premises for five days or less.

Consumer products used for experiments **not consistent with their intended use** should be added to the chemical register and their safety data sheets made available.

Science ASSIST recommends the inclusion of non-hazardous chemicals and consumer products used in science to the register and to include technical information such as:

- Purchase date
- Storage location
- Amount of product onsite
- GHS classification
- UN Number
- Dangerous goods code
- Poisons schedule
- CAS Number
- Risk assessment available
- SDS issue date

When creating a chemical register, it is crucial that you confirm the chemical register requirements for your jurisdiction as the regulations may differ between Australian states and territories.⁴

It is recommended to review a chemical register annually and to update it when new chemicals are purchased or disposed of, or their location changes.

What is a Manifest?

The [Model WHS Regulations](#)¹ stipulate that a manifest is only required when stored chemicals classified as hazardous and a dangerous good, exceed manifest threshold quantities.^{5,6,7} A chemical manifest is more detailed than a chemical register and must include, the proper shipping name, UN Number, ADG code, quantity of the chemical stored, a site plan and emergency contact details.

Most schools do not have quantities large enough to require a manifest.

What is a Safety Data Sheet?

A [Safety Data Sheet \(SDS\)](#)^{8,9} is a document that provides detailed information about a hazardous chemical. The information in the SDS includes 16 separate sections each with specific information relating to the chemical being used, handled, stored, transported or disposed as follows:

1. Identification
2. Hazard(s) identification
3. Composition and information on ingredients
4. First aid measures
5. Firefighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls and personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Any other relevant information.

What makes the SDS Compliant?

In all jurisdictions manufacturers and suppliers have an obligation to provide the SDS for any hazardous chemical they supply or upon request. A compliant SDS must:

- be obtained from the manufacturer or supplier
- have an issue date no more than 5 years old
- be written in English
- contain 16 separate headings
- state the name, address and business telephone number of the Australian importer or manufacturer

It is best practice to audit your chemical register on a regular basis to ensure that the date of issue is current.

The SDS must be manufacturer specific. A third party SDS prepared by a consultant or chemical management system, can be used to supplement information however caution must be exercised to ensure that it is the same formulation, e.g., a pure chemical.¹⁰ If a hazardous chemical is old, the manufacturer has ceased trading and an updated SDS is therefore unavailable, consideration should be given to disposal depending upon the condition of the chemical and if it is still required. If acceptable in your jurisdiction, the original SDS can be kept with a note indicating that it is the latest one available, and providing the formulation is the same, a more recent SDS from another supplier or third party SDS should be used to supplement the information.¹¹

Any concerns regarding the compliance of the SDS should be followed up with the Work Health and Safety regulator in your state/territory.⁴

Do I need the SDS for non-hazardous chemicals and consumer products?

You do not need to keep the SDS for chemicals classified as non-hazardous.^{2,3} However, Science ASSIST recommends that the SDS, if available, is obtained for non-hazardous chemicals as they will provide useful information for the chemical properties, safe use, incompatibilities, handling, storage and disposal advice.

Consumer products do not require the SDS when used as the product is intended. When products are not used in accordance with their intended use, such as in a science activity, then the SDS is required.^{2,3}

Manufacturers and suppliers of non-hazardous chemicals are not required to provide safety data sheets.

Where is the Register, Manifest and SDS kept?

A chemical register/manifest and safety data sheets may be kept as e-copies on the school intranet, provided that all relevant staff have the necessary computer skills and have access to the database. To ensure accessibility, and in the event of a power outage or emergency, Science ASSIST recommends as a minimum a printed copy of the list of chemicals be made available in a central location and this list and a copy of printed safety data sheets should also be kept where the chemical is used and stored.



Legislation, Regulations and Work Health and Safety Jurisdictions.

It is imperative that you confirm the laws that govern chemical registers and SDSs in your state/territory as some jurisdiction may vary slightly. For example, the Work Health and Safety laws have been implemented in all states except Victoria. Science ASSIST recommends that you consult the regulations of your jurisdiction.

Recommendations

Science Assist recommends the following:

- Be familiar with factsheets and information available on the Safe Work Australia website.^{3,8}
- Source the SDS for non-hazardous chemicals and consumer products (if not being used for intended purposes).
- Audit your SDS register on a regular basis.
- Keep a printed copy of the register in a central location.
- Keep a printed copy of the register and safety data sheets where the chemicals are used/stored.
- Consult the regulations of your jurisdiction if you have any concerns.⁴

References and further reading

- ¹ Safe Work Australia. (2022). *Model WHS regulations*. Retrieved from <https://www.safeworkaustralia.gov.au/doc/model-whs-regulations>
 - ² Safe Work Australia. (2022). *Hazardous Chemicals Register*. Retrieved from <https://www.safeworkaustralia.gov.au/safety-topic/hazards/chemicals/hazardous-chemical-records-and-signs-workplaces/hazardous-chemicals-register>
 - ³ Safe Work Australia. (April 2012). *Hazardous Chemicals Register Fact Sheet*. Retrieved from <https://www.safeworkaustralia.gov.au/doc/hazardous-chemicals-register-fact-sheet>
 - ⁴ Safe Work Australia. (2022). *WHS Regulators and Workers' Compensation Authorities contact information*. Retrieved from <https://www.safeworkaustralia.gov.au/law-and-regulation/whs-regulators-and-workers-compensation-authorities-contact-information>
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 - ⁶ Safe Work Australia. (2022). *Placard and manifest threshold quantities*. Retrieved from <https://www.safeworkaustralia.gov.au/safety-topic/hazards/chemicals/hazardous-chemical-records-and-signs-workplaces/placard-and-manifest-threshold-quantities>
 - ⁷ Storemasta. (Updated 2022, January). *What is the difference between a Register and a Manifest of Hazardous Chemicals?* Retrieved from <https://blog.storemasta.com.au/difference-between-register-manifest-hazardous-chemicals>
 - ⁸ Safe Work Australia. (2012). *Understanding safety data sheets for hazardous chemicals*. Retrieved from [Safety Data Sheet \(SDS\) https://www.safeworkaustralia.gov.au/resources-and-publications/guidance-materials/understanding-safety-data-sheets-hazardous-chemicals](https://www.safeworkaustralia.gov.au/resources-and-publications/guidance-materials/understanding-safety-data-sheets-hazardous-chemicals)
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 - ¹⁰ Safe Work South Australia. (2022). *Safety data sheets*. Retrieved from <https://www.safework.sa.gov.au/workplaces/chemicals-substances-and-explosives/safety-data-sheets>
 - ¹¹ Work Safe WA. (2021, August). *Hazardous Substances FAQs What do I do if the SDS for the hazardous substance I have at my workplace is out of date?* Retrieved from <https://www.commerce.wa.gov.au/worksafe/hazardous-substances-faqs#what-do-i-do-if-the-sds-for-the-hazardous-substance-i-have-at-my-workplace-is-out-of-date->
- Safe Work Australia. (2022). *Model Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace*. <https://www.safeworkaustralia.gov.au/doc/model-code-practice-managing-risks-hazardous-chemicals-workplace>

