



A Brief Guide to Managing Hazardous Substances

**Practical guidance for small and medium-sized New Zealand
businesses**

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About this guide

Hazardous substances are common in many New Zealand workplaces, including farms, workshops, laboratories, cleaning operations, manufacturing, construction, maintenance, retail, and storage areas. If they are not managed properly, they can cause fires, explosions, burns, poisoning, long-term illness, environmental harm, and serious injury.

This guide summarises the key actions small and medium-sized businesses should take to manage hazardous substances safely and meet their responsibilities under New Zealand's hazardous substances health and safety framework.

What is a hazardous substance?

A hazardous substance is a product or chemical that has one or more dangerous properties. It may be:

- **Explosive** — can explode or cause an explosion.
- **Flammable** — catches fire easily and burns quickly.
- **Oxidising** — can cause or intensify fire or explosion.
- **Toxic** — can harm people if inhaled, swallowed, or absorbed through the skin.
- **Corrosive** — can cause severe skin burns or eye damage.
- **Ecotoxic** — can harm the environment.

Many everyday workplace products may be hazardous substances, including fuels, solvents, cleaning chemicals, agrichemicals, paints, adhesives, gases, laboratory chemicals, and some waste products.



Why this matters

Hazardous substances are a major contributor to work-related disease and serious harm in New Zealand. Some effects are immediate, such as burns, poisoning, fire or explosion. Others may occur over time, such as respiratory illness, cancer, organ damage, or other long-term health conditions.

Every business that manufactures, uses, handles or stores hazardous substances needs to understand what it has, what harm could occur, and what controls are needed to protect workers, visitors, contractors, emergency services, the public, and the environment.

1. Know what hazardous substances you have

You cannot manage hazardous substances properly unless you know what is on site.

Your business should keep an up-to-date inventory of all hazardous substances that are manufactured, used, handled or stored at the workplace. This should include hazardous waste.

Your inventory should record:

- the name of each hazardous substance
- the quantity stored or used
- where it is kept
- relevant hazard information
- whether a current safety data sheet is available
- any substances that are no longer needed and should be removed

PLEASE NOTE

The inventory must be readily accessible to emergency services workers. It should also be easy for workers and managers to use in day-to-day risk management. A useful first step is to identify substances that can be eliminated, substituted or reduced before creating or updating the full inventory.



Safety data sheets and risk assessment

2. Keep safety data sheets available

A safety data sheet gives important information about a hazardous substance, including:

- what the substance is
- its health and safety hazards
- how it should be stored and handled
- what protective equipment may be needed
- what to do in an emergency
- first aid information
- spill and disposal requirements

You should have a safety data sheet for each hazardous substance in your workplace. These should be current, easy to find, and readily accessible to workers and emergency services.

3. Assess and manage the risks

Once you know what substances you have, assess the risks they create. Consider:

- who may be exposed
- how exposure could happen
- what harm could result
- how much of the substance is present, and how often it is used
- how and where it is stored
- whether workers understand the risks
- whether controls are actually working in practice

Your inventory and safety data sheets will help identify the controls required. However, documentation alone is not enough — you should also check how substances are actually used, stored and handled in the workplace.

REVIEW RISK CONTROLS WHEN

New substances are introduced, quantities change, work practices or storage locations change, incidents, spills or near misses occur, workers raise concerns, or safety data sheets are updated.



Reduce the risk where you can

The best way to manage hazardous substances is to remove or reduce the hazard where reasonably practicable. Work through the following order:

- 1 **Eliminate** substances that are not needed.
- 2 **Substitute** a hazardous substance with a safer alternative where possible.
- 3 **Isolate** the hazard so people do not come into contact with it.
- 4 **Use engineering controls**, such as ventilation, containment, extraction systems, or automated processes.
- 5 **Use administrative controls**, such as procedures, supervision, job rotation, restricted access, and safe work instructions.
- 6 **Use personal protective equipment**, such as gloves, eye protection, protective clothing or respirators, where risk remains after other controls are applied.

PLEASE NOTE

Personal protective equipment should not be treated as the first or only control. It must be suitable, properly used, maintained, and supported by training and supervision.

5. Inform, train and supervise workers

Workers who use, handle, store or work near hazardous substances need to know how to do so safely. Training should cover:

- what hazardous substances are present, and the risks they create
- how to read labels and safety data sheets
- safe handling and storage requirements, and required control measures
- emergency procedures and spill response
- correct use of personal protective equipment
- what to do if something goes wrong

Training should be practical, relevant to the work, and supported by supervision. Businesses should keep records of training and instruction provided to each worker.



Labelling and signage

6. Label containers clearly

All hazardous substance containers must be clearly and correctly labelled so people know what is inside and what hazards are present. This includes:

- original containers supplied by manufacturers or suppliers
- substances transferred or decanted into smaller containers
- stationary tanks and process containers
- transportable containers
- containers holding hazardous waste

Labels should be readable, durable, and kept attached to the container. Unlabelled or poorly labelled containers create unnecessary risk and should be dealt with promptly.

7. Use signs where required

Signs help workers, visitors, contractors and emergency services understand that hazardous substances are present. Signs should be placed where they can be easily seen, such as entrances to buildings or storage areas, outdoor storage locations, areas where hazardous substances are used, chemical stores, workshops, laboratories, or processing areas.

Signs should clearly communicate that hazardous substances are present, the general type of hazard, and emergency information where required. The signage needed will depend on the types and quantities of hazardous substances at the workplace.



Storage and extra requirements

8. Store hazardous substances safely

Safe storage depends on the type, quantity and hazard classification of the substance. When reviewing storage, consider whether:

- incompatible substances are kept apart
- containers are in good condition and closed when not in use
- storage areas are secure
- ventilation is adequate
- spills can be contained
- ignition sources are controlled
- emergency equipment is available
- quantities are kept to the minimum needed

Keeping only the amount you need can make hazardous substances easier to manage and may reduce compliance complexity and cost.

9. Check whether extra requirements apply

Some substances and quantities may trigger additional requirements, including certified handlers, controlled substance licences, compliance certificates, tracking requirements, specific storage or separation controls, and emergency management requirements.

PLEASE NOTE

Highly hazardous substances, such as some explosives or highly toxic substances, need particular care. Businesses should use reliable tools and competent advice to confirm what applies to their workplace.



Emergencies and disposal

10. Plan for emergencies

Everyone who may be affected by a hazardous substances emergency should know what to do. Emergency planning should cover:

- fire, explosion, spill, leak or exposure scenarios, and who is responsible for what
- how workers will raise the alarm, and evacuation or isolation arrangements
- first aid arrangements and spill response
- access to safety data sheets and the hazardous substances inventory
- information needed by emergency services
- how emergency equipment will be maintained and checked

Workers should be trained in emergency procedures and know how to respond if something goes wrong.

11. Dispose of unwanted substances safely

Unwanted or expired hazardous substances still create risk. They should not be ignored, poured down drains, placed in general waste, or left indefinitely in storage. Safe disposal should begin with identifying the substance, checking the safety data sheet, confirming the quantity and condition of the container, marking substances that are not to be used, storing them safely until disposal, and contacting the local council, supplier, specialist disposal provider, or relevant recovery scheme for advice.

Empty containers can also create risk if residues remain. They should be cleaned, handled, recycled or disposed of according to the applicable guidance for that substance and container type. For agrichemicals and eligible farm chemical containers, Agrecovery provides collection, recovery and recycling options in New Zealand.



Practical checklist

Use this checklist as a starting point.

Question	Yes / No / Action needed
Do we have a current inventory of all hazardous substances and hazardous waste?	
Is the inventory easy to access, including for emergency services?	
Do we have current safety data sheets for each hazardous substance?	
Have we removed substances we no longer need?	
Have we considered safer substitutes?	
Are containers clearly labelled and labels readable?	
Are substances stored safely and separated where needed?	
Are signs in place where required?	
Have workers been trained and supervised?	
Do we keep training records?	
Are emergency procedures in place and understood?	
Do we have spill response arrangements?	
Do we know whether any substances require extra controls or certification?	
Are unwanted substances and empty containers disposed of safely?	
Do we review hazardous substance controls regularly?	



Where to get help

Small and medium-sized businesses do not need to work this out alone. Useful sources of information include:

- **WorkSafe New Zealand** — guidance on workplace hazardous substances and responsibilities
- **Hazardous Substances Toolbox** — practical tools, including the Hazardous Substances Calculator
- **Safety data sheets** from suppliers
- **Local councils** for disposal advice
- **Agrecovery** for agrichemical recovery and container recycling
- Competent health and safety, hazardous substances, occupational hygiene, fire, emergency management, or environmental specialists where the risk or complexity warrants it

Key message

Managing hazardous substances starts with knowing what you have, understanding the risks, putting the right controls in place, and checking that those controls work in real day-to-day conditions.

For small and medium-sized businesses, the most important actions are:

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|---|--|
| <ul style="list-style-type: none">• keep an accurate inventory• maintain safety data sheets• train and supervise workers• label and store substances correctly | <ul style="list-style-type: none">• plan for emergencies• dispose of unwanted substances safely• review controls regularly |
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PLEASE NOTE

A simple, well-maintained system is better than a complicated system that no one uses. The goal is to make hazardous substances visible, understood and controlled before they cause harm.



Need help managing your hazardous substances?

Contact: enquiry@safemetrics.co.nz

Website: www.safemetrics.co.nz

This guide provides general information only. It does not replace New Zealand hazardous substances legislation, regulations, WorkSafe New Zealand guidance, or professional advice for your specific circumstances. If you are unsure about your duties, or if your work involves higher-risk substances, seek advice from a competent hazardous substances or health and safety practitioner.

Source used: WorkSafe New Zealand brochure, "10 Key Things You Need to Know and Do: What the Hazardous Substances Regulations mean for you."