

# Certification of locations holding toxic and corrosive substances

February 2020



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#### **KEY FACTS**

If you hold liquid or solid class 6.1A, 6.1B, 6.1C, 8.2A and 8.2B hazardous substances, and

- a. the quantities of these substances exceed the threshold amounts (Table 1), and
- b. you intend to store them for longer than 2 or 24 hours (depending on the substance), and
- c. the substances are in storage in a single location

then you will need to meet the requirements for a hazardous substance location (HSL) and obtain a location compliance certificate.

SUBSTANCE CLASS	THRESHOLD FOR A PLACE	THRESHOLD FOR FARMS (not less than 4ha)
6.1A	50L or 50kg	100L or 100kg
6.1B	250L or 250kg	500L or 500kg
6.1C	1000L or 1000kg	3500L or 3500kg
8.2A	50L or 50kg	500L or 500kg
8.2B	250L or 250kg	3500L or 3500kg

**TABLE 1:** HSL thresholds for certain toxic and corrosive substances

You don't need to meet HSL requirements or get a location compliance certificate if you:

- meet the requirements described in <u>Section 6</u> of this guide, and
- are temporarily storing class 6.1A, 6.1B or 6.1C substances for an imminent pest control or pesticide application task, or
- are storing class 6 and 8 substances in quantities at or below the thresholds stated in Table 1, or
- are storing class 6 and 8 substances for less than
   2 or 24 hours (depending on the substance), or
- are storing class 6 and 8 substances at separate locations on-site where the quantities at each separate location are at or below the thresholds stated in Table 1.

# 1.0 Introduction

#### Who is this guide for?

This guide is for a person conducting a business or undertaking (PCBU) who need to meet HSLs requirements and obtain location compliance certificates for toxic and corrosive substances at their workplace. In this guide, 'you' means the PCBU.

In simple terms, a PCBU is an individual or a company carrying on a business, but it can also be other types of organisation. More information on the PCBU and other duty holders in the workplace is available on our website: <a href="worksafe.govt.nz">worksafe.govt.nz</a>

#### Scope of this guidance

This guide describes the requirements for certification of HSLs holding certain solid or liquid toxic (class 6.1A, 6.1B, 6.1C) and corrosive (class 8.2A and 8.2B) substances. It explains:

- when you need to meet requirements for a hazardous substance location (HSL) to store toxic and corrosive substances
- the rules for storing toxic and corrosive substances at HSLs
- which substances are incompatible with toxic and corrosive substances
- when you need a location compliance certificate
- what you need to do to get a location compliance certificate
- how to store toxic and corrosive substances when an HSL is not required.

These requirements apply to the storage of toxic and corrosive substances in containers including packages, drums, transportable containers (including portable tanks) and stationary tanks.

These requirements for HSLs do not apply to transit depots. Transit depots have specific requirements. You can hold substances in a transit depot for a maximum of three days, as long as the containers remain closed at all times.

For further information, see  $\underline{\text{Transit Depots}}$  on the WorkSafe website.

#### What about the use and handling of substances?

This guide explains the certification requirements of toxic and corrosive substances when they are in storage. However, PCBU's must also manage the risks of these substances at all stages of their lifecycles. See our <u>Guide to hazardous substance risk management</u> for information on managing the risks associated with hazardous substances.

# 2.0 Hazardous substance locations (HSLs) for class 6 and 8 substances

#### What is an HSL?

An HSL is a place at which certain hazardous substances are stored in quantities above a specified amount and for more than a specified period of time. You must put in place controls to minimise the risks associated with storing the substances in your workplace. This protects workers and other people in the workplace, as well as the workplace itself, neighbouring properties and the environment.

#### Do you need to meet HSL requirements?

If you hold liquid or solid class 6.1A, 6.1B, 6.1C, 8.2A and 8.2B hazardous substances:

- in quantities that exceed the threshold amounts in Table 1, and
- store them for longer than 2 or 24 hours (depending on the substance), and
- the substances are in storage

then you will need to meet the HSL requirements.

#### Do you hold more than the threshold amounts?

When calculating whether you have to meet the HSL requirements for class 6 and 8 substances, first consider all the 6.1A, 6.1B, 6.1C, 8.2A and 8.2B substances that will be stored at your workplace.

Then, add together all 6.1A, 6.1B, 6.1C, 8.2A and 8.2B substances, except for those substances that are incompatible and stored separately.

Note: Several individual substances that are under the specified amount for an HSL may exceed the threshold amount when stored together. You can either calculate this yourself or use the Calculator

Use <u>Appendix 2</u> to help you work out whether you need to meet the requirements of an HSL if you have different types of class 6 & 8 substances

If you use the Calculator you need to be aware that:

- The Calculator determines incompatibility based on the classification of the substance. This means that the Calculator will not always identify incompatible substances
- If substances are stored separately they should be entered in the Calculator
  as separate inventories. If all substances are entered into one inventory the
  Calculator will consider it one HSL. The Calculator can't determine that they
  are being stored separately.

#### **Timing**

You need to meet the HSL requirements if you store the substances for more than 2 hours (tracked substances) or 24 hours (substances which do not require tracking).

(Generally, class 6.1A and 6.1B substances require tracking and class 6.1C, 8.2A and class 8.2B substances do not. To find out if your substances require tracking, enter them into the Calculator)

For further information, see Tracking on the WorkSafe website.

#### Are the substances in storage?

You must meet the HSL requirements and obtain a location compliance certificate if:

- the substances are in storage, and
- the thresholds for quantity and time are exceeded

A substance is in storage when it is in a:

- container that is closed and is not connected to or actively supplying a process
- container that is temporarily opened within the designated store (for example for decanting), or
- stationary container system other than a process container.<sup>1</sup>

Containers may be temporarily opened within the storage area for the purpose of activities such as decanting.

#### WHAT IS NOT IN STORAGE?

You do not need to meet the HSL requirements and obtain a location compliance certificate if the substances are not in storage.

A substance is not in storage when it is in a:

- container that is supplying a process, either continuously or intermittently, and is either manually controlled or controlled by the process (for example a tank connected to a processing vat)
- container that is for use in the processing area (for example for cleaning), or
- process container such as a mixing container.

#### What are the HSL requirements?

If you have an HSL for toxic or corrosive substances you must meet requirements relating to:

- stores and/or storage cabinets
- separation from protected and public places
- site plans
- the training and supervision of workers
- the segregation of incompatible substances
- structures and equipment
- personal protective equipment (PPE)
- signage
- certified handlers and securing substances

<sup>&</sup>lt;sup>1</sup> The regulations define a process container as a stationary container that contains, or is intended to contain, a hazardous substance in the course of manufacture or use of the substance for example: a mixing container, reaction vessel, distillation column, drier or dip tank.

- controlled substance licences
- secondary containment
- emergency management.

#### Stores and storage cabinets

If you have an HSL then you must make sure that your HSL for storing toxic and corrosive substances is either:

- a store other than an indoor storage cabinet for class 6 and 8 substances
- an indoor storage cabinet for class 6.1A, 6.1B and 6.1C substances
- an indoor storage cabinet for class 8.2A and class 8.2B substances.

## STORES OTHER THAN INDOOR STORAGE CABINETS FOR CLASS 6 AND 8 SUBSTANCES

Stores, other than indoor storage cabinets, include:

- structures which hold containers of substances (for example, buildings or rooms within a building)
- designated areas where substances are held in containers (for example, outdoor compounds), or
- single containers (for example, IBCs or stationary tanks).

If you manage or control an HSL that is a store for toxic and corrosive substances, you must make sure that it meets the requirements set out in Appendix 3

### INDOOR STORAGE CABINETS FOR CLASS 6.1A, 6.1B AND 6.1C SUBSTANCES

If you manage or control an HSL that is an indoor storage cabinet for toxic (class 6.1A, 6.1B or 6.1C) substances, you must make sure that it meets the requirements set out in  $\underline{\sf Appendix}\ 4$ 

#### INDOOR STORAGE CABINETS FOR 8.2A AND 8.2B SUBSTANCES

If you manage or control an HSL that is an indoor storage cabinet for corrosive (class 8) substances, you must make sure that it meets the requirements set out in Appendix 5

#### Separation requirements for stores of class 6 and 8 substances

#### **SEPARATION DISTANCES**

Tables 2, 3 and 4 below show separation distances for:

- protected places and stores of toxic substances
- public places and stores of toxic substances
- protected places and stores of corrosive substances.

The separation distances shown in the tables below relate to closed packages and only show some of the quantities specified in the Regulations.

Please refer to the Regulations if your substance:

- is toxic and also has a 3.1 classification, or
- is in a retail store.

QUANTITY IN KG OR L	CLASS 6.1A	CLASS 6.1B	CLASS 6.1C
>50 to 250	5	N/A	N/A
> 250 to 1000	5	3	N/A

#### TABLE 2:

Minimum separation distances between protected places and HSLs for closed containers of class 6 substances (m)

QUANTITY IN KG OR L	CLASS 6.1A	CLASS 6.1B	CLASS 6.1C
> 50 to 250	5	N/A	N/A
> 250 to 1000	5	3	N/A

#### FIGURE 3:

Minimum separation between public places and HSLs for closed containers of class 6 substances (m)

	CLASS 8.2A	CLASS 6.1B
Closed containers	5	3

#### TABLE 4:

Minimum separation between protected places and HSLs for class 8 substances (m)

#### WHAT IS A PROTECTED PLACE?

A protected place includes a place:

- where people live (for example, a house)
- of worship, a public building, a school or college, a hospital, a child care facility, or a theatre
- where large numbers of people regularly gather (for example, a sports ground)
- where people are regularly employed (for example, a workplace).

A protected place may be within or outside the boundary of the property where the HSL is situated.

A protected place also includes ships that are docked at permanent berthing facilities and public railways.

A protected place does not include a small office or small building associated with the HSL where storage of the substances is a major function.

#### WHAT IS A PUBLIC PLACE?

A public place is any place, other than a private property or a protected place, which is open to and frequented by the public, and includes public roads.

# Measuring the separation distance from your hazardous substance store

Separation distances for stores, other than stationary tanks, holding toxic and corrosive substances can be measured as follows:

- Where there is a structure marking the area designated as the store, the separation distance should be measured from the outside edge of the structure (for example, a wall or a fence).
- Where there is no structure marking the area designated as the store, the separation distance should be measured from the edge of the designated area (for example, edge of secondary containment).
- Where the store is the whole building, the separation distance should be measured from the outside of the building.

Separation distances can be measured in a horizontal plane around an intervening screen wall, provided that wall height, markings and fire-resistance requirements are met.

For a store that is a stationary tank, the separation distance should be measured from the wall of the tank.

#### Site plans

Your site plan must show:

- the physical location of all HSLs within your workplace that hold class 6 and 8 substances in storage
- all distances from the HSLs to protected and public places and the distances between HSLs.

#### Training and supervision of workers

Workers need to know about the hazardous substances in their work area and the dangers they pose. They must get the information, training and instruction necessary before they are allowed to carry out or supervise work involving hazardous substances.

You must also provide workers with suitable and adequate supervision to protect them from risks to their health and safety from the work they are undertaking involving hazardous substances.

See our <u>Guide to information, training and instruction for workers handling hazardous substances</u> for information on the training and supervision requirements.

#### Segregation of incompatible substances

Not all hazardous substances can be stored together safely. Some substances are incompatible or can react dangerously when they come into contact. A table showing incompatible substances that are incompatible with class 6 and 8 substances is in Appendix 6

Generally, this means that substances that are incompatible must be stored in separate compounds or separated by at least 5m, or by 3m if both substances are solids.

If the HSL is an indoor cabinet, it must not hold substances that are incompatible or might react dangerously.

If you use the <u>Calculator</u> to create an inventory you need to identify incompatible substances or substances that can react dangerously if they have the same classifications.

For example, the Calculator will not determine that substances that are acids and alkalis are incompatible because they are both class 8.2 substances.

Therefore, you need to refer to the Safety Data Sheet (SDS) for incompatibilities.

#### Structures and equipment

Any fixed structure or installed equipment within an HSL must be constructed from material that is compatible with the class 6 and 8 substances held in it.

#### PPE

Workers involved in the decanting of substances from the storage area must be provided with suitable PPE.

Make sure that your safety gear is right for the substances you use. Check the product SDS and ask your safety equipment or substance supplier.

#### Signage

You must display signs to let workers, emergency service workers and other people know what hazards to expect at your workplace.

See our  $\underline{\text{Guide to Hazardous Substance Signage}}$  for information on the signage requirements.

#### Certified handlers and securing substances

What substances must be under the control of a certified handler or secured?

- All class 6.1A and 6.1B substances.
- Class 6.1 substances that need a controlled substance licence
- Certain other toxic and corrosive substances as listed in <u>Schedule 14</u> of the Regulations.
- All class 6.1C or 8.2A substances.

See our <u>Guide to certified handler requirements</u> for information on the certified handler requirements.

Making substances secure could mean locking the substances up or it could involve other methods of security, such as installing a digital key pad and distributing the code only to authorised people.

#### Controlled substance licences

You'll need a controlled substance licence (CSL) to possess certain, class 6.1 substances, such as vertebrate toxic agents (VTAs) and fumigants.

See our <u>Controlled substances licences</u> for information on the licencing requirements.

#### Secondary containment

A secondary containment system will make sure that liquid substances are contained if they spill or leak from the container they are held in and that they will be able to be recovered.

It prevents direct exposure of people to harmful hazardous substances by containing spills or leaks.

It also protects substances from coming into contact with incompatible substances and materials that could cause a dangerous reaction.

Whether you need secondary containment depends on the classification and quantity of the substances you have in your workplace. You can find this detail in <a href="Schedule 16">Schedule 16</a> of the Regulations, or you can enter your substances and their quantity into the <a href="Calculator">Calculator</a> to find out whether you need secondary containment.

#### Emergency management

Whether you store substances at an HSL or not, you must be prepared for any potential emergency that could happen at your workplace. If you hold more than a quantity of hazardous substances specified in Table 6 at your workplace, you must prepare an emergency response plan (ERP).

HSNO CLASSIFICATION	LIQUID	SOLID	
Class 6.1A, 6.1B, 6.1C, 8.2A	100L (CCA)	100kg (cyanide baits)	
6.1D, 6.5A, 6.5B, 6.7A, 8.2B	1000L (ACQ concentrate)	1000kg	

TABLE 5: Thresholds for emergency response plans

When you enter your hazardous substances into the <u>Calculator</u> it will tell you whether you need to prepare an ERP and how many fire extinguishers are needed.

WorkSafe has an up-to-date template for an ERP called the Emergency Response Flipchart that helps you prepare your response for emergencies, including emergencies involving toxic and corrosive substances.

You can find the Flipchart and Calculator at: www.hazardous substances.govt.nz

#### ADDITIONAL EMERGENCY MANAGEMENT REQUIREMENTS

You must have equipment and materials for dealing with and cleaning up spills and leaks, readily available. These include:

- the correct PPE
- spill handling and spill containment equipment
- chemicals for neutralising or decontaminating spills
- absorbent materials.

You should also have an appropriate leak proof disposal container.

See the SDS for more information on emergency management for a specific substance.

# 3.0 If you have an HSL, you will need a location compliance certificate

You will need a location compliance certificate for your HSL where solid or liquid toxic and corrosive substances are stored.

A compliance certifier will issue you with a location compliance certificate if you meet the following requirements:

ITEM	CHECK
You <u>notified WorkSafe</u> at least 30 working days before commissioning your storage area as an HSL	
You meet any applicable <u>certified handler</u> requirements or the substances appropriately secured from persons other than those who may handle under certain circumstances	
You meet applicable requirements where substances do not require a certified handler that they are appropriately secured from people other than those who have your permission substances	•
You have provided information, training and instruction to the workers who handle the substances and have records of training and instruction	•
You have <u>separated</u> the substances from protected and public places by the required distances	•
You are not storing class 6 and 8 substances with any incompatible substances	•
You meet the requirements for <u>storage cabinets</u> or <u>stores</u> (as applicable)	•
You have a <u>site plan</u> available for inspection	•
You have ensured any structure or installed equipment in the HSL is <u>constructed</u> of materials that are compatible with class 6 or 8 substances	•
You have ensured that equipment used to handle class 6 and 8 substances and any PPE meets the specified requirements	•
You have the appropriate <u>signs</u> in the right places	
You have complied with any applicable requirements for emergency management	•
You have the clean-up materials and equipment you need	•
You have met any secondary containment requirements for your substances	

TABLE 6: Location compliance certificate checklist

# 4.0 How do you get a location compliance certificate?

The first step to getting a location compliance certificate is to contact a compliance certifier who is authorised to issue class 6 and 8 location compliance certificates. You can find a list of compliance certifiers on the WorkSafe website: worksafe.govt.nz

A compliance certifier is an independent person authorised by WorkSafe to issue compliance certificates for people, equipment and locations. For locations, the compliance certifier certifies that the location meets the requirements in the Regulations.

The compliance certifier will check the requirements that apply to your workplace, and if everything is compliant, you will be issued a location compliance certificate for up to 36 months.

# 5.0 Other requirements

You must also comply with other requirements relating to hazardous substances. These include rules about:

- safety data sheets
- labelling and packaging
- inventories.

#### Safety data sheets

SDSs provide important health and safety information about your hazardous substances. You must have a current SDS for each of the hazardous substances in your workplace regardless of the quantity you hold.

See our <u>Guide to safety data sheets in the workplace</u> for information on SDS requirements.

#### Labelling and packaging

Containers that contain hazardous substances must be labelled and packaged appropriately. This includes containers where you may have decanted or transferred substances into other containers that are held in storage or are storing hazardous waste.

See our <u>Guide to Labelling</u>, decanting and repackaging hazardous substances in <u>the workplace</u> for information on the signage requirements.

#### **Inventories**

You must have an inventory of all your hazardous substances. It's important to know what hazardous substances you have in order to safely manage their risks to your workers and others who may be exposed to hazardous substances in your workplace.

See our  $\underline{\text{Guide to inventory requirements for hazardous substances}}$  for information on the inventory requirements.

## 6.0

# What are the storage requirements if you are storing less than the threshold amount for an HSL?

You must meet certain requirements if you:

- are storing class 6 and 8 substances:
  - in quantities at or below the thresholds stated in Table 1 or
  - for less than the period of time specified for meeting the requirements for an HSL or
- are temporarily storing class 6.1A, 6.1B or 6.1C substances for an imminent pest control or pesticide application task.

These requirements include making sure:

- the storage place can be appropriately secured from access by anyone other than the people that have your permission to access the place
- water is available for personal hygiene (such as washing hands)
- all storage and handling areas have adequate ventilation
- substances that are <u>incompatible</u> or those that may react dangerously are not kept near each other
- containers are kept away from heat sources, are securely closed when not in use, and are kept in a manner that avoids spillage
- you have spill containment measures in areas where you open containers or transfer substances.

## What are the storage requirements on a farm below the threshold amount for an HSL?

If you store toxic or corrosive substances (6.1A, 6.1B, 6.1C, 8.2A and/or 8.2B) below the specified amounts for meeting the HSL requirements for a farm of not less than 4 ha, you must make sure that:

- the substances are at least 10m from any <u>protected place</u> there is no combustible vegetation or rubbish on the ground within 3m of the storage area
- you use secondary containment or store the substances in an area where any spills will not reach any protected place, waterways, or boundaries with other properties
- the substances are at least 15m from the boundary of your property.

#### What about the temporary storage of VTAs and pesticides?

If you are temporarily storing class 6.1A, 6.1B or 6.1C substances for an imminent pest control or pesticide application task, you do not need to meet the HSL requirements as long as you meet the basic storage requirements described above.

Examples of temporary storage include holding the substances in a vehicle, or in an area for handling bait or loading area for aircraft. In other words, temporary storage means placing a substance somewhere for a job, and not storage between separate jobs or permanently.

However, you must notify WorkSafe where you will store these substances at least 24 hours before you commission the temporary storage place.

The notification form is available on the WorkSafe website:  $\underline{\text{worksafe.govt.nz}}$ 

# 7.0 More information

WorkSafe has other useful information on handling toxic and corrosive substances:

- Brief guide to location compliance certificates for toxic and corrosive substances
- Policy clarification Storing Class 6 and 8 Hazardous Substances
- Guide to certified handler requirements
- Information sheets on which VTAs require controlled substance licences
- Protective clothing
- Register of compliance certifiers

The following resources are available at: hazardoussubstances.govt.nz

- The <u>Hazardous Substances Calculator</u> where you can enter the substances in your workplace to find out the key controls that you have to put in place.
- Your Practical Guide to working safely with hazardous substances is an introduction to many controls for a hazardous substances workplace and explains how they work together.
- The Emergency Response Flipchart

# Appendix 1: HSNO health-related hazardous substance classifications

This is the full list of all health-related hazardous substances classifications that are listed by the NZ EPA, including those that apply to this guide.

CLASSIFICATION CODE	MEANING
Acutely toxic	
6.1A	Substances that are acutely toxic - Fatal
6.1B	Substances that are acutely toxic - Fatal
6.1C	Substances that are acutely toxic - Toxic
6.1D	Substances that are acutely toxic - Harmful
6.1E	Substances that are acutely toxic - May be harmful, aspiration hazard
Skin irritant	
6.3A	Substances that are irritating to the skin
6.3B	Substances that are mildly irritating to the skin
Eye irritant	
6.4A	Substances that are irritating to the eye
Sensitisation	
6.5A	Substances that are respiratory sensitisers
6.5B	Substances that are contact sensitisers
Mutagens	
6.6A	Substances that are known or presumed human mutagens
6.6B	Substances that are suspected human mutagens
Carcinogens	
6.7A	Substances that are known or presumed human carcinogens
6.7B	Substances that are suspected human carcinogens
Reproductive/developme	ntal toxicants
6.8A	Substances that are known or presumed human reproductive or developmental toxicants
6.8B	Substances that are suspected human reproductive or developmental toxicants
6.8C	Substances that produce toxic human reproductive or developmental effects on or via lactation
Target organ toxicants	
6.9A	Substances that are toxic to human target organs or systems
6.9B	Substances that are harmful to human target organs or systems
Skin corrosive	
8.2A	Substances that are corrosive to dermal tissue (UN PGI)
8.2B	Substances that are corrosive to dermal tissue (UN PGII)
8.2C	Substances that are corrosive to dermal tissue (UN PGIII)
Eye corrosive	
8.3A	Substances that are corrosive to ocular tissue

 $\begin{tabular}{ll} Source: $\underline{$w$ww.epa.govt.nz/industry-areas/hazardous-substances/rules-for-hazardous-substances/hazardous-substances-classification-codes \\ \end{tabular}$ 

# Appendix 2: The threshold amounts for determining whether the need for an HSL is met

To determine whether you need to meet HSL requirements you will need to consider whether toxic and corrosive (6.1A, 6.1B, 6.1C, 8.2A and/or 8.2B) substances are being stored at the location and take the quantity and classification of each toxic or corrosive substance into account.

- 1. Divide the quantity of substances with a particular hazard classification by the specified quantity for that classification.
- 2. Add up the results for all of the classifications of the substances that will be at that place.
- 3. If the result is more than one, you will need an HSL.

Include all class 6 and 8 substances that will be in the same place in the same calculation unless they are <u>incompatible</u> and stored separately.

For example, if you hold 26 litres of a class 6.1A substance and 125 litres of a class 8.2B substance, and they are not incompatible and stored separately, this will be the calculation of the ratios:

- the class 6.1A substance has a specified amount of 50 litres, so the ratio is 26/50, or 0.52.
- the class 8.2B substance has a specified amount of 250 litres, so the ratio is 125/250, or 0.5.
- the sum of the two ratios is 1.02. This is greater than 1, so you will need to meet the HSL requirements.

Remember, if you store substances at an HSL together, they must not be <u>incompatible</u>. For example, you must not store a class 6.1A toxic cyanide with a class 8.2B corrosive acid.

# Appendix 3: Requirements for stores for toxic and corrosive substances

If you manage or control an HSL that is a store for toxic and corrosive substances, you must make sure that:

- there is immediate access for emergency service workers. The access needs to be on the same floor as your HSL (unless otherwise approved by WorkSafe)
- only authorised people can access the store. Your store needs to be appropriately secured from access by anyone other than the people that have your permission to access the store
- there are at least two ways to access the store if it has a floor area larger than 25m<sup>2</sup>
- any walls, roof sheeting and main supports of structures built or materially changed after 1 June 2019 are made of non-combustible materials resistant to the substances being stored
- if there is a risk of inhaling toxic dusts, mists or vapours:
  - any storage areas are suitably ventilated
  - ambient concentrations are maintained as low as reasonably practicable, and
  - exposure levels are maintained below any prescribed exposure standard.
- the store has a system to contain spills or divert them to secondary containment inside your workplace
- if substances are decanted in the store, the floors are able to contain a spill or divert it to secondary containment inside your workplace
- racks or shelves don't build up liquid, unless they are spill trays
- containers of toxic and corrosive substances are kept:
  - away from sources of heat
  - securely closed while not in use in a way that avoids spillage
  - away from all <u>incompatible</u> substances or substances that can react dangerously with them
- if containers are in stacks, they will not collapse and the upper layers will not damage containers in lower layers
- in stores where containers are opened (for example, for decanting purposes), there is a safety shower, eye-washing facilities, and water for washing hands
- there is water for washing hands in stores where containers stay closed at all times.

# Appendix 4: Requirements for indoor storage cabinets for toxic substances

If you manage or control an HSL that is an indoor storage cabinet for toxic (class 6.1A, 6.1B or 6.1C) substances, you must make sure that:

- the cabinet is marked with:
  - the name and address of the manufacturer or, if imported, the New Zealand distributor
  - its maximum storage capacity, and
  - a hazard pictogram for class 6.1 substances.
- the cabinet complies with:
  - the design requirements in section 4.4.2.3 of AS/NZS 4452:1997 *The storage* and handling of toxic substances, or
  - European Standard EN 14470:01 *The storage of highly flammable liquids in a cabinet* with a fire-resistance of 60 minutes.
- if mechanical ventilation is required, it meets the requirements in section 4.4.2.4 of AS/NZS 4452:1997 The storage and handling of toxic substances
- the cabinet does not block emergency exits
- the cabinet is near a water supply for hand-washing
- the cabinet is not used for storing <u>incompatible</u> substances or substances which could react dangerously if stored together
- no more than 250kg or 250L of toxic substances are stored in a single cabinet of which:
  - no more than 25kg or 25L of these substances are class 6.1A substances
  - no more than 50kg or 50L of these substances are class 6.1B substances
- if there is more than one cabinet in a building or area, either the aggregate quantity of toxic substances in all the cabinets must not exceed the quantities in the previous bullet point, or the cabinets must be separated by at least 3m.
- if you have more than one cabinet in a building or area they must be separated by at least 3m unless the total quantity of toxic substances in all the cabinets is no more than 250kg or 250L of class 6 substances and:
  - no more than 25kg or 25L of these substances are class 6.1A substances
  - no more than 50kg or 50L of these substances are class 6.1B substances.



# Appendix 5: Requirements for indoor storage cabinets for corrosive substances

If you manage or control an HSL that is an indoor storage cabinet for corrosive substances, you must make sure that:

- the cabinet is marked with:
  - the name and address of the manufacturer or (if imported) the New Zealand distributor
  - its maximum storage capacity, and
  - a hazard pictogram for class 8.2 substances.
- the cabinet meets the design requirements of sections 4.6.4 and 4.6.5 of AS 3780-2008 *The storage and handling of corrosive substances*
- the cabinet does not block emergency exits
- the cabinet is located near a water supply for hand-washing
- the cabinet is not used for storing <u>incompatible</u> substances or substances which could react dangerously if stored together
- no more than 1000kg or 1000L of class 8 substances are stored in a single cabinet of which:
  - no more than 50kg or 50L of these substances are class 8.2A substances
  - no more than 250kg or 250L of these substances are class 8.2B substances
- if you have more than one cabinet in a building or area they must be separated by at least 5m unless the total quantity of class 8 substances in all the cabinets is no more than 1000kg or 1000L and:
  - no more than 50kg or 50L of these substances are class 8.2A substances and
  - no more than 250kg or 250L of these substances are class 8.2B substances.



#### Appendix 6: Incompatible substances

HAZARD CLASSIFICATION	INCOMPATIBLE SUBSTANCES AND MATERIALS
6.1A, 6.1B, 6.1C substances	- All class 1 substances
	- All class 5 substances
6.1A, 6.1B, 6.1C toxic cyanides	- All class 1 substances
	- All class 5 substances
	- Class 8.2 corrosive acids
8.2A and 8.2B corrosive acids	- All class 1 substances
	- Class 4.3A, 4.3B, 4.3C substances
	- All class 5 substances
	- Class 6.1A, 6.1B, 6.1C toxic cyanides
	- Class 8.2A and 8.2B corrosive alkalis
8.2A and 8.2B corrosive alkalis	- All class 1 substances
	- Class 4.3A, 4.3B, 4.3C substances
	- All class 5 substances
	- Class 8.A and 8.2B corrosive acids

#### Disclaimer

This publication provides general guidance. It is not possible for WorkSafe to address every situation that could occur in every workplace. This means that you will need to think about this guidance and how to apply it to your particular circumstances.

WorkSafe regularly reviews and revises guidance to ensure that it is up-to-date. If you are reading a printed copy of this guidance, please check <u>worksafe.govt.nz</u> to confirm that your copy is the current version.

ISBN 978-1-98-856763-1 (online)

Published: February 2020

PO Box 165, Wellington 6140, New Zealand

worksafe.govt.nz



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ISBN 978-1-98-856763-1 (online)

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