



2.0

Approvals, hazard classifications and controls

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2.1 Approvals

Every hazardous substance imported into New Zealand or manufactured in New Zealand must be approved under the HSNO Act and have an approval number.

Most products that small businesses use are approved under group standards. These are approvals for similar substances or products with a similar use (eg **HSR002530** Cleaning Products). If a product's hazard classifications and uses are covered by a group standard, an importer or manufacturer can assign it to that group standard and use its approval number.

You can usually find approval numbers on the safety data sheet (SDS) in *Section 15: Regulatory Information*. If you can't find the approval number on your SDS, contact your supplier. For more information about the SDS, see page 28 of this guide.

You can also find the approval numbers on the EPA *Approved Hazardous Substances with Controls* database, available at their website: www.epa.govt.nz

When you enter the name of most hazardous substances into the *Hazardous Substances Calculator* (the Calculator), it will also provide the approval number.

The Calculator lists the key controls from the Health and Safety at Work (Hazardous Substances) Regulations 2017 (the Regulations) and the HSNO Act that apply to substances.

For more information about how to use this information in the Calculator see page 15 of this guide.

2.2 Hazard classifications

Hazardous substances can be classified under several similar systems. New Zealand uses the HSNO system, based on the United Nations (UN) system for classifying dangerous goods for transport and the Globally Harmonised System of Classification and Labelling of Chemicals (GHS). Substances manufactured overseas may use another system.

See page 9 of this guide for more information on HSNO hazard classifications.

Your product's classification should be listed in the *Hazards Identification* section of the SDS, usually Section 2. See page 28 of this guide for more information on the SDS.

Classification systems

HSNO CLASSIFICATION

HSNO classifications are currently used in New Zealand to classify hazardous substances. Hazardous substances are assigned a classification largely based on the UN dangerous goods classification system. However, for labelling, SDS and packaging, the GHS system may be used (see below).

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS)

The GHS is an internationally agreed system that aims to replace the classification and labelling standards used in different countries with globally consistent criteria. Like the HSNO classification system, it assigns substances or articles to 9 physical hazard classes largely based on the United Nations Dangerous Goods system. It also classifies health and environmental hazards into type. Products brought into New Zealand from overseas may use the GHS system rather than HSNO on labels, the SDS or packaging. A conversion table for HSNO and GHS classifications is available at: www.epa.govt.nz

UN NUMBER

The UN number is a four digit number assigned to hazardous materials and articles for international transport. Numbers are assigned to individual hazardous substances or groups of chemicals or products with similar properties.

UN CLASS

UN classes classify dangerous goods into classes for transport according to their hazard. Some classes are subdivided into divisions. The class numbers are generally similar to those used in the HSNO classifications (see below), except for class 9, which is miscellaneous under the UN system and for substances toxic to the environment under HSNO.

UN PACKING GROUP

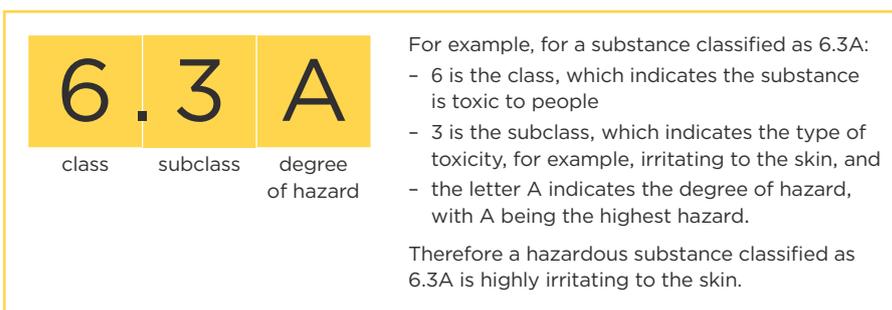
Packing groups determine what protective packaging is required for dangerous goods during transportation. There are three groups (I, II and III) representing high, medium or low danger.

You can use the UN class and packing group in the calculator if the HSNO classification is unavailable.

HSNO classification system

The HSNO classes are:

- Class 1 - explosives (note that this guide does not provide information about explosives)
- Class 2 - flammable gases
- Class 3 - flammable liquids
- Class 4 - flammable solids
- Class 5 - oxidising substances
- Class 6 - substances toxic to people
- Class 8 - corrosive substances
- Class 9 - substances toxic to the environment.



**FIGURE 1:
HSNO Classification System**

The HSNO system uses numbered classes and subclasses to indicate the hazardous properties of a substance

MOST HAZARDOUS SUBSTANCES HAVE MORE THAN ONE CLASSIFICATION

Because most hazardous substances have more than one hazardous property, they also have more than one classification. For example, petrol is classified as 3.1A (highly flammable liquid), 6.1E (acutely toxic - may be harmful, aspiration hazard), 6.3B (mildly irritating to the skin), 6.7B (suspected human carcinogen) and 9.1B (toxic to the aquatic environment).

2.3 Controls for managing hazardous substances

Whenever a hazardous substance is present in your workplace, you need to put in place the controls for that substance. Your substance's controls come from the Regulations and the HSNO Act.

The simplest way to find out the key controls that apply to your substance is to enter its name or approval number into the Calculator.

Some controls are required for every substance. In the Calculator, most of these controls are grouped together as 'Generic Controls'. Other controls apply only if you have substances in your workplace over specified threshold quantities.

Controls for hazardous substances in any quantity

AN INVENTORY AND SAFETY DATA SHEETS FOR ALL HAZARDOUS SUBSTANCES YOU USE, HANDLE, MANUFACTURE AND STORE

You must prepare and maintain an inventory of all the hazardous substances used and stored at your workplace, including hazardous waste. See WorkSafe's inventory quick guide for information on how to prepare an inventory of your hazardous substances. See also page 15 of this guide for information about what to include in an inventory.

You need an SDS for each substance in your workplace. See page 28 of this guide for a list of the sections of an SDS.

RISK ASSESSMENT FOLLOWED BY ELIMINATION OR MINIMISATION

If you cannot eliminate a hazardous substance from your workplace or substitute it with a safer one, and any risk remains after you have applied the controls for the substance from the regulations and the substance approval, minimise the risk using control measures described on page 5 of this guide in the introduction and in more detail between pages 16 and 19.

INFORMATION, INSTRUCTION, TRAINING AND SUPERVISION

Workers need training and instruction to make sure they have the knowledge and experience to use, handle, manufacture and store hazardous substances safely, or they need to be supervised by someone who has this knowledge. See page 20-21 of this guide for more information.

EMERGENCY PREPARATION

Make sure your workers and workplace are prepared for an emergency and that you have an emergency response plan. See page 40 of this guide for more information.

LABELLING CONTAINERS OF HAZARDOUS SUBSTANCES (INCLUDING HAZARDOUS WASTE)

You need to label all containers of hazardous substances at the workplace, including containers of hazardous waste. See pages 24-27 of this guide for more information.

PPE

You have a duty to ensure the provision of any and all PPE the worker requires to carry out their work. See pages 18-19 of this guide for more information.

Substance specific controls

If you use, handle, manufacture or store some hazardous substances over specific threshold quantities, you may need to put in place additional controls.

The Calculator will help you work out what key controls apply.



FIRE EXTINGUISHERS

If you have flammable or oxidising substances, you may need a specific type and number of fire extinguishers. However, even if it's not a requirement for your substances, you should always have fire extinguishers available. See page 41 of this guide for more information.

SIGNS

Depending on the types and amounts of hazardous substances you use or store, you may need signs to warn people that hazardous substances are present. However, it's always best practice to have signs in place. See pages 29-31 of this guide for more information.

CERTIFIED HANDLERS

A certified handler is someone who has specific knowledge and experience about how to handle specified highly toxic, and explosive substances and who holds a compliance certificate from a compliance certifier. See pages 45-46 of this guide for more information.

A LOCATION COMPLIANCE CERTIFICATE

If you have flammable, oxidising, toxic or corrosive substances at your workplace, you may need a location compliance certificate to certify that you are managing the risks associated with those substances. See pages 47-48 for more information.

HAZARDOUS AREAS

This is an area around flammable substances where sources of ignition are excluded to prevent ignition of a flammable vapour resulting in fire/explosion. See pages 36-37 of this guide for more information.

EMERGENCY RESPONSE PLAN

An emergency response plan is a written document that lists what will be done in an emergency involving your hazardous substances and who is responsible for each task. See page 42 of this guide for more information.

SECONDARY CONTAINMENT (BUNDING)

A secondary containment system contains liquid substances if they leak or spill from the container or vessel they are stored in and enables them to be recovered. See page 42 of this guide for more information.

A STATIONARY CONTAINER SYSTEM COMPLIANCE CERTIFICATE

If you have a stationary tank containing a gas or liquid hazardous substance, you may need a stationary container system compliance certificate to certify that your tank is safe and complies with the rules.

The Calculator will tell you whether a stationary container system compliance certificate is required. See page 49 of this guide for more information.

TRACKING

Tracking is a record of the lifecycle of a substance. The Calculator will tell you whether tracking is required for your substance. See pages 51-52 of this guide for more information.

AN APPROVED FILLER CERTIFICATE

An approved filler certificate certifies that a person has the necessary training, knowledge and skills to fill compressed gas containers safely, and that this knowledge has been certified by a compliance certifier. See pages 46-47 of this guide for more information.

CONTROLLED SUBSTANCE LICENCE

You need a controlled substance licence (CSL) to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See WorkSafe's website for more information on obtaining a controlled substance licence and what substances require a controlled substance licence (CSL).