Transporting diesel and other environmentally hazardous substances (UN 3077 and UN 3082)

Note: This document is mainly about diesel, but most of the information also applies to other environmentally hazardous substances classified as UN 3077 or UN 3082, such as some chemicals used in agriculture.

There is only a summary of transport requirements in this document and for full details you must refer to Land Transport Rule: Dangerous Goods 2005 and Land Transport Rule: Dangerous Goods Amendment 2010. Together, these rules are known as the Dangerous Goods Rule or the Rule. Copies of the Rule are available on the New Zealand Transport Agency website: www.NZTA.govt.nz.

Classification of diesel

Diesel (with a flash point over 60° C) is now classified as dangerous goods for transport and from the beginning of 2011 new rules will apply to everyone who transports diesel.

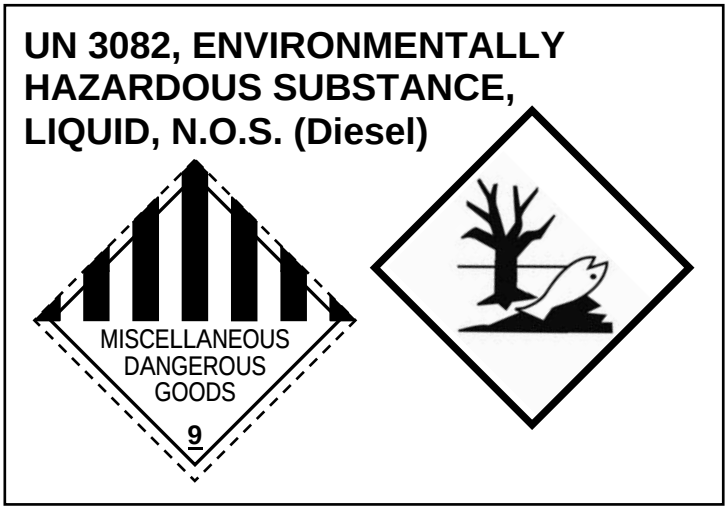
There are two classifications for diesel, which depend on its flash point. Diesel with a flash point of 60° C or less is classified as a flammable liquid for transport. It is sometimes called low flash point diesel or alpine diesel. Its correct identification for transport by UN number, proper shipping name, class and packing group is: UN 1202, GAS OIL or DIESEL FUEL or HEATING OIL, LIGHT, Class 3, packing group III. Diesel in this category has been classified as dangerous goods for transport for many years and there are no changes to the rules that affect this product.

Diesel with a flash point over 60° C is classified as an environmentally hazardous substance for transport due to its toxicity to the aquatic environment. This is high flash point diesel. Its correct identification for transport by UN number, proper shipping name, class and packing group is: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diesel), Class 9, packing group III. In the past, diesel in this category has not been classified as dangerous goods for transport on land in New Zealand, but new international criteria for environmental hazards now apply to high flash point diesel.

Labelling and marking for containers of 450 litres or less and for IBCs

All containers of diesel must be identified as dangerous goods for transport. Containers with a capacity more than 5 litres and up to 450 litres (e.g. jerricans and drums) and Intermediate Bulk Containers (IBCs) must display the UN number, proper shipping name, class label and the environmentally hazardous substance mark. Containers of 5 litres (or 5 kg) or less do not need the environmentally hazardous substance mark, but must have the class label, UN number and proper shipping name.

The example below is for high flash point diesel. For other environmentally hazardous substances, the Class 9 label and environmentally hazardous substance mark are the same as shown for diesel, but the UN number and proper shipping name must be changed to identify the particular product. The name in brackets at the end of the proper shipping name must be the technical name of the component of the product that makes it environmentally hazardous. e.g. UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains 2.3% permethrin).



Size and position of labels and marks

The Class 9 label and the environmentally hazardous substance mark must have minimum dimensions of 100 mm x 100 mm except on packages that are too small. *New Zealand Standard 5433:2007, Transport of Dangerous Goods on Land* recommends that labels for containers over 5 litres and up to 25 litres should be 50 mm x 50 mm. Containers for more than 25 litres should have 100 mm x 100 mm labels. Jerricans must display labels and marks on at least one side or on a tag attached securely to the handle. Drums must display labels and marks on the side, in the upper half, but away from bungs to avoid damage caused by spillage.

See full size examples of labels and marks at the end of this document.

Placarding and marking for tankwagons, tank trailers and containers over 450 litres

Containers for bulk quantities of diesel (i.e. more than 450 litres) such as tankwagons, tank trailers and portable tanks must display class placards, emergency information panels, the proper shipping name and environmentally hazardous substance marks. Emergency information panels must include the UN number, Hazchem code and a 24 hour emergency telephone number. The proper shipping name is also typically shown on emergency information panels. The Hazchem code provides the Fire Service with information about the dangerous goods such as whether to use water or foam to fight a fire and how to treat spillages. The Hazchem code for high flash point diesel is 3Z.

Size of placards and marks on tankwagons, tank trailers and containers over 450 litres

The minimum dimension measured along any side for class placards and emergency information panels is 400 mm on tankwagons and 250 mm on other containers, such as portable tanks. The environmentally hazardous substance mark must be at least 250 mm x 250 mm. Tank trailers or portable tanks that are too small to fit large placards may display smaller ones, provided the placards and marks remain as large as practical, the proper shipping name is legible from a distance of 10 metres and the nature of the load can be readily identified from a distance of 25 metres in daylight.

The placards and marks shown below are drawn to a scale of approximately 1:5. They represent a small class placard and an environmentally hazardous substance mark with dimensions of 250 mm x 250 mm and a small emergency information panel with dimensions of 297 mm x 420 mm, which is the size of an A3 sheet of paper. At these sizes, the proper shipping name should be legible from a distance of 10 metres and the nature of the load should be readily identifiable from 25 metres in daylight.

Placards and marks for high flash point diesel (reduced size, scale 1:5 approx.)

Position of placards and marks on tankwagons, tank trailers and containers over 450 litres

Tankwagons and tank trailers must display the class placard, emergency information panel, proper shipping name and environmentally hazardous substance mark on the rear and on both sides of the tank. The class placard must also be displayed on the front of the tankwagon or tank trailer. For people who tow tank trailers containing 2000 litres or less of high flash point diesel for domestic or recreational purposes or as tools-of-trade, for agricultural use or for a commercial purpose, but not for hire or direct reward, you do not need to display a class placard on the front of your tow vehicle.

Portable tanks and other containers over 450 litres must display the class placard, emergency information panel, proper shipping name and environmentally hazardous substance mark on both sides or on the front and rear of the tank or its cradle.

Placarding and marking tankwagons used for low flash point and high flash point diesel

Tankwagons and tank trailers that carry low flash point diesel (UN 1202, Class 3) and high flash point diesel (UN 3082, Class 9) in separate loads or in separate compartments do not have to change placards every time the load changes. They can be permanently placarded for low flash point diesel, UN 1202, Class 3. They must display class placards, emergency information panels, the proper shipping name and a “no smoking” warning. All of this information can be combined into the class placard and emergency information panel as shown below.

The placards shown below are drawn to a scale of approximately 1:5. They represent the standard size placards for a tankwagon, with dimensions of 400 mm x 400 mm for the class placard and 400 mm x 600 mm for the emergency information panel. The placards can be reduced in size if necessary, provided they remain as large as practical, the proper shipping name and “no smoking” warning are legible from a distance of 10 metres and the nature of the load can be readily identified from a distance of 25 metres in daylight.

Placards for low flash point diesel tankwagons (standard size, scale 1:5 approx.)

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Transport procedures

Everyone who transports dangerous goods for hire or reward or as tools-of-trade, for agricultural use, or for any commercial purpose must carry emergency response information and know about the hazards, safe handling and emergency procedures for those goods. A simple example of emergency response information is shown below.

Emergency Response Information

UN Number	Proper shipping name	Class	Packing Group
UN 3082	**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diesel)**	**9**	**III**

In an emergency:

- Move to a safe distance from the incident, at least 15 metres if diesel is leaking. Take emergency response information and cell phone with you
- **Dial 111** and ask for Police or Fire Service
- Tell them where the incident has happened and any details of injuries
- Tell them that dangerous goods are involved and advise the UN number, proper shipping name and class of the dangerous goods, as written at the top of this page
- Warn the public and keep them clear of the incident
- Keep upwind and to higher ground
- Follow the instructions of the Police or Fire Service

Driver training and complying with the Dangerous Goods Rule

A dangerous goods driver licence endorsement is not required for high flash point diesel or any other Class 9 dangerous goods that are toxic to the aquatic environment (UN 3077 or UN 3082).

However, if you transport any quantity of diesel or other products classified as UN 3077 or UN 3082 for hire or reward in a commercial transport service (other than Small Packages or dangerous goods in excepted quantities in accordance with Section 2 of the Dangerous Goods Rule), you must comply with all the other requirements for transporting dangerous goods. This includes carrying dangerous goods declaration documents in a holder attached to the driver's door, segregating incompatible dangerous goods, displaying placards on vehicles and tanks, complying with transport procedures and the general training provisions of the Dangerous Goods Rule. These requirements also apply if you transport dangerous goods as tools-of-trade, for

agricultural use or for a commercial purpose, but not for hire or direct reward and the quantity is more than 2000 litres of high flash point diesel, or more than 1000 kg or 1000 litres of other products that are toxic to the aquatic environment and classified as UN 3077 or UN 3082.

You must refer to the Dangerous Goods Rule for full details of the requirements and your responsibilities. Significant penalties apply for breaches of the Rule. If you are an employer or if you are self employed, it is your responsibility to ensure that you and your employees comply with the Rule.

Examples of labels and marks for containers of high flash point diesel

The following pages show examples of labels and marks for high flash point diesel containers. The standard size for class labels and environmentally hazardous substance marks is 100 mm x 100 mm. This size should be used on all containers unless they are too small for the labels and marks to fit. *New Zealand Standard 5433:2007, Transport of Dangerous Goods on Land* includes a guide to minimum label sizes, which allows them to be reduced to 50 mm x 50 mm for containers over 5 litres and up to 25 litres. Examples of labels and marks of this size are shown on the next page. The environmentally hazardous substance mark is not required on containers of 5 litres (or 5 kg) or less, but they must still be identified with the Class 9 label, UN number and proper shipping name.

The last page shows a 100 mm x 100 mm Class 9 label and environmentally hazardous substance mark. They should be used on containers over 25 litres and up to 450 litres.

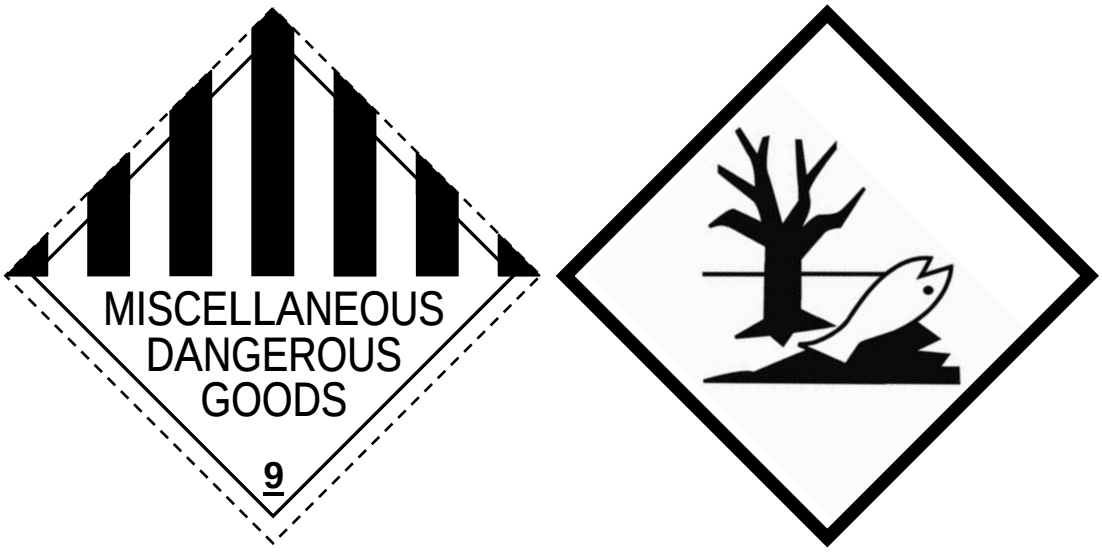
Labels and marks are available from businesses such as printers, sign makers, packaging suppliers and safety equipment suppliers.

Alternatively, the examples on the next two pages can be printed and attached to containers. The labels and marks must be firmly attached so that they will not come off during transport. They must also be protected from weathering. This may require the application of a clear coat varnish or the printed labels could be laminated in clear plastic. On some containers, such as plastic jerricans, labels will not stick very well. In this situation, the labels and marks should be placed on a tag which can be attached to the handle of the jerrican.

The labels and marks must remain attached at all times, even when the container is empty. In all situations if a label is lost, damaged or becomes faded, it must be replaced.

Note: If you print the labels on the following pages, you must measure them to check that they have been reproduced at 50 mm x 50 mm or 100 mm x 100 mm as described above. You might have to adjust the page scaling to “none” or adjust page margins so that the labels will print at 100% of the original size.

UN 3082
ENVIRONMENTALLY
HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (Diesel)



UN 3082, ENVIRONMENTALLY
HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (Diesel)

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UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diesel)

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