



TRANSPORTATION OF SOILS CONTAMINATED WITH FLAMMABLE LIQUIDS

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Purpose

This bulletin is to assist shippers and carriers transporting soils contaminated with flammable liquids such as crude oil, gasoline, and diesel to comply with the *Transportation of Dangerous Goods (TDG)* Regulations.

Soil contaminated with flammable liquids is generally classified as Class 4.1, Flammable Solids, as it may be readily combustible.

Classification

Soil contaminated with flammable liquids is commonly transported as “**UN3175, SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S., Class 4.1, Packing Group II**” using Special Provision 56 without performing the tests and criteria found in [Part 2 \(Classification\) of the TDG Regulations](#).

If it is not possible to follow Special Provision 56, then proper testing to determine the classification of the material must be completed.

[Sections 2.20 through 2.22](#), in Part 2 of the TDG Regulations describe the requirements for a substance to be classified as Class 4.1, Flammable Solids.

Please note: Special Provisions 16 and 56 apply to UN3175.

Special Provision 16

The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name [\[Section 3.5\(1\)\(c\)\(ii\)\(A\)\]](#).

Special Provision 56

A mixture of solids that are not dangerous goods and liquids included in Class 3, flammable liquids may be handled, offered for transport or transported under **UN3175, SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.** without the tests and criteria for including substances in Class 4.1, Flammable Solids, if:

- there is no visible liquid at the time the mixture is loaded into a container or at the time the container is closed; and
- each container is leak-proof.

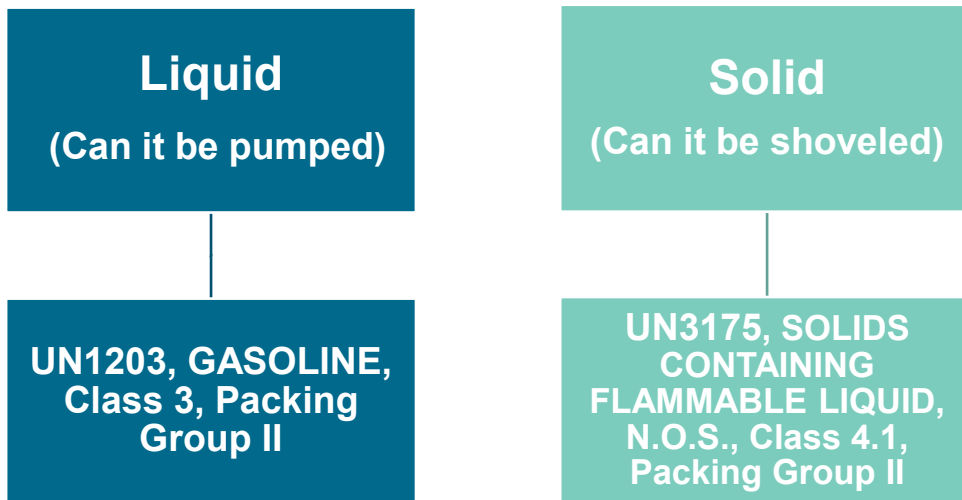
The TDG Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to a sealed packet or article containing less than 10 mL of dangerous goods included in Class 3, Flammable Liquids, packing group II or III, if there is no free liquid in the packet

or article.

Determining the classification of fuel contaminated soil

Often the site of a fuel spill will have soils in various states. The area could be a naturally formed gravel, a sandy loam, clay, or a bog/swamp. Sometimes due to the nature of the area, there could be pooling of the spilled liquid, or the flammable liquid could end up in a waterway. The classification of soil contaminated with flammable liquid can be determined by following the steps in the example below. In this example, gasoline is the contaminant in the soil:

Is the flammable mixture more:



In case of uncertainty, the person classifying the substance should follow the classification process found in [Part 2 \(Classification\) of the TDG Regulations](#).

Examples of UN3175 Classification, with Technical Names

UN #	Shipping Name	Class	Packing Group
UN3175	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (PETROLEUM CRUDE OIL)	4.1	II
UN3175	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (GASOLINE)	4.1	II

Documentation

A dangerous goods shipping document must accompany each consignment of dangerous goods, unless exempted by the TDG Regulations. The consignor (shipper) is responsible for supplying the shipping document to the carrier (Section 3.1). More information can be found in the [TDG Bulletin – Shipping Document](#) and [TDG Bulletin – Residue - Last Contained](#).

For details on alternate and additional documentation requirements, consult [Part 3 \(Documentation\) of the TDG Regulations](#).

A Hazardous Waste Manifest or Recycle Docket is used when shipping dangerous goods intended for treatment, disposal or recycling. These serialized pre-printed forms are available free of charge from the appropriate provincial or territorial authority, or from the [Waste Reduction and Management Division](#), Environment and Climate Change Canada (ECCC).

Safety marks

Safety marks are the placards, labels and package markings, which identify dangerous goods shipments (Part 4 of the TDG Regulations), and show the nature of the danger, or indicate compliance with the prescribed safety standards. These safety marks are provided by the shipper and must be maintained in good condition during transport by the carrier. More information can be found in the [TDG Bulletin – Dangerous Goods Safety Marks](#).

Means of containment

The Transportation of Dangerous Goods (TDG) Act, Regulations and safety standards require dangerous goods to be contained in a compliant means of containment. More information can be found in [TDG Bulletin – Dangerous Goods Means of Containment](#).

Training

Anyone who handles, offers for transport or transports dangerous goods must be adequately trained and have a valid Transportation of Dangerous Goods Training Certificate, or must be in the presence of and under the direct supervision of a trained person. More information can be found in the [TDG Bulletin - Training](#).

Reporting requirements

The person in possession of dangerous goods at the time of a release or anticipated release must make a verbal Emergency Report to the local authorities as soon as possible. The person may be required to make an additional Emergency Report to Transport Canada through CANUTEC when specific situations occur such as the closure of a highway. For detailed information on reporting requirements, please consult the [Guide for reporting dangerous goods incidents](#) and [Part 8 \(Reporting Requirements\) of the TDG Regulations](#).

Compliance with the *Transportation of Dangerous Goods Act and Regulations*

Failure to comply with the TDG Act and TDG Regulations may lead to fines and/or imprisonment. For more information, you can visit [Transportation of dangerous goods in Canada](#).

Contact us

For questions about the TDG Regulations, contact your local Transport Canada regional office.

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