



New Zealand Standard

Transport of dangerous goods on land

Part 2: List of dangerous goods

Superseding NZS 5433:Part 2:2007

NZS 5433:Part 2:2012

COMMITTEE REPRESENTATION

This Standard was prepared under the supervision of the P 5433 Committee the Standards Council established under the Standards Act 1988.

The committee consisted of representatives of the following:

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Custom Brokers and Freight Forwarders' Federation of New Zealand Inc.
Department of Labour
Environmental Protection Authority (formerly ERMA New Zealand¹)
Environmental Protection Authority (formerly ERMA New Zealand)
HazKnow Ltd
KiwiRail
Liquified Petroleum Gas Association of New Zealand
Maritime New Zealand
Ministry of Health
New Zealand Fire Service
New Zealand Police
New Zealand Transport Agency
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We acknowledge use of material from the following publications:

- (a) UN Recommendations on the Transport of Dangerous Goods (UNRTDG) – Model Regulations – Sixteenth revised edition. 2009
- (b) UN Recommendations on the Transport of Dangerous Goods – Manual of Tests and Criteria (UNRTDG MTC) – Fifth revised edition (ST/SG/AC.10/11/Rev.5). 2010
- (c) International Maritime Dangerous Goods Code. 2010
- (d) Australian Dangerous Goods Code – Seventh edition. 2007
- (e) KiwiRail Operating Code Supplement CS3.3 Conveyance of Dangerous Goods. 2011

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1 The functions of ERMA New Zealand transferred to the Environmental Protection Authority on 1 July 2011.

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REFERENCED DOCUMENTS

Reference is made in this part of the Standard to the following:

ISO STANDARDS

ISO 780:1997	Packaging – Pictorial marking for handling of goods
ISO 3711:1990	Lead chromate pigments and lead chromate-molybdate pigments – Specifications and methods of test
ISO 8115:1986	Cotton bales – Dimensions and density
ISO 13943:2008	Fire safety – Vocabulary

AMERICAN STANDARDS

ASTM D240-09	Standard test method for heat of combustion of liquid hydrocarbon fuels by bomb calorimeter
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OTHER PUBLICATIONS

- Environmental Protection Authority (EPA). Guide to Gas Cylinders. September 2011
- International Air Transport Association (IATA). Dangerous Goods Regulations (latest version)
- International Civil Aviation Organization (ICAO). Technical Instructions for the Safe Transport of Dangerous Goods by Air (latest version)
- International Maritime Organization. International Convention for Safe Containers (CSC). 1972
- National Fire Protection Association. NFPA 30B: Code for the Manufacture and Storage of Aerosol Products. 2011
- Organisation for the Prohibition of Chemical Weapons. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention). 1997
- United Nations Economic Commission for Europe (UNECE). UN Recommendations on the Transport of Dangerous Goods – Manual of Tests and Criteria – Fifth revised edition. 2009
- United Nations Economic Commission for Europe (UNECE). UN Recommendations on the Transport of Dangerous Goods – Model Regulations – Sixteenth revised edition. 2009
- World Health Organization (WHO). Recommended Classification of Pesticides by Hazard, and Guidelines to Classification. 2009

NEW ZEALAND LEGISLATION

- Civil Aviation Act 1990
- Civil Aviation Rules, Part 92 – Carriage of Dangerous Goods (latest version)
- Hazardous Substances and New Organisms Act 1996
- Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001
- Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001

Hazardous Substances (Classification) Regulations 2001
 Hazardous Substances (Compressed Gases) Regulations 2004
 Hazardous Substances (Disposal) Regulations 2001
 Hazardous Substances (Emergency Management) Regulations 2001
 Hazardous Substances (Fireworks) Regulations 2001
 Hazardous Substances (Fireworks, Safety Ammunition, and Other Explosives Transfer) Regulations 2003
 Hazardous Substances (Fumigants) Transfer Notice 2004
 Hazardous Substances (Identification) Regulations 2001
 Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001
 Hazardous Substances (Packaging) Regulations 2001
 Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004
 Hazardous Substances (Tracking) Regulations 2001
 Land Transport Act 1998
 Land Transport Rule: Dangerous Goods 2005 (Rule 45001/1) and the Dangerous Goods Amendments 2010 and 2011
 Maritime Transport Act 1994
 Maritime Rules, Part 24A – Carriage of Cargoes – Dangerous Goods (latest version)
 Radiation Protection Regulations 1982

WEBSITES

Civil Aviation Authority (www.caa.govt.nz)
 Environmental Protection Authority (www.epa.govt.nz)
 International Atomic Energy Agency (www.iaea.org)
 Maritime New Zealand (www.maritimenz.govt.nz)
 Ministry of Agriculture and Forestry (www.maf.govt.nz)
 Ministry of Health (www.moh.govt.nz)
 National Radiation Laboratory (www.nrl.moh.govt.nz)
 New Zealand legislation (www.legislation.govt.nz)
 New Zealand Transport Agency (www.nzta.govt.nz)
 United Nations Economic Commission for Europe (Transport of dangerous goods site <http://live.unece.org/trans/danger/danger.html>)
 UNRTDG Model Regulations, sixteenth revised edition (www.unece.org/trans/danger/publi/unrec/rev16/16files_e.html)

LATEST REVISIONS

The users of this Standard should ensure that their copies of the above-mentioned New Zealand Standards are the latest revisions. Amendments to referenced New Zealand and Joint Australian/New Zealand Standards can be found at www.standards.co.nz.

FOREWORD

This Standard is in two parts. Part 1 is the main body of the Standard detailing technical requirements, including classification criteria and packaging performance standards. Part 2 contains information such as the UN list of dangerous goods and special provisions. Material which is incorporated by reference in the Land Transport Rule: Dangerous Goods is identified by shaded text. Referenced documents for both parts are in Part 1 of the Standard.

The two-part arrangement began in 2007 and has continued in this 2012 revised version of the Standard. However, the review committee decided that section 5 of Part 2 (list of currently assigned organic peroxides) should be moved to section 2.5.3.2.5 of Part 1.

Other significant changes to Part 2 include:

- (a) Quantity limits for dangerous goods in excepted quantities added to Column 7 in Table 1;
- (b) Additions and amendments to Table 2 in section 2;
- (c) Tables 3 and 4 updated.

OUTCOME STATEMENT

This Standard revises the 2007 edition, and provides up-to-date information on New Zealand legislative requirements and internationally accepted practice for the safe transport of dangerous goods on land. The Standard is a reference source to guide those who manufacture, package, label, transport, or regulate the transport of dangerous goods by road or rail within New Zealand. The Standard provides technical information to comply with the Land Transport Rule: Dangerous Goods 2005 and Dangerous Goods Amendments 2010 and 2011 (the Dangerous Goods Rule).

REVIEW OF STANDARDS

Suggestions for improvement of this Standard will be welcomed. Suggestions should be sent to the Chief Executive, Standards New Zealand, Private Bag 2439, Wellington 6140.

ABBREVIATIONS

The following abbreviations are used in this part of the Standard.

a	Used in Column 13, Table 1 to denote substances that are not approved under the Hazardous Substances and New Organisms Act, but may be used by the New Zealand Defence Force
b	Used in Column 13, Table 1 to denote substances that are approved under the Hazardous Substances and New Organisms Act
B	Used in Column 9, Table 1 to refer to the special packing provision applicable to the use of packing instructions bearing the code 'IBC' in 4.1.4.2 of Part 1 of this Standard
BK	Used in Column 10, Table 1 to refer to types of bulk containers used for the transport of bulk goods described in Chapter 6.8 of the UNRTDG
c.c.	Closed cup (flash point) (Column 14, Table 1)
GMMO	Genetically modified microorganisms
GMO	Genetically modified organisms
HSNO	Hazardous Substances and New Organisms Act
IBC	Intermediate bulk container
L	Used in Column 9, Table 1 to refer to the special packing provision applicable to packing instructions bearing the code 'LP' in 4.1.4.3 of Part 1 of this Standard
L.E.L.	Lower explosive limit (Column 14, Table 1)
LP	Used in Columns 8 and 9, Table 1 to refer to packing instructions for the use of large packagings described in Chapter 6.6 of the UNRTDG
N.O.S.	Not otherwise specified
P	Used in Column 8, Table 1 to refer to packing instructions for the use of packagings described in Chapters 6.1, 6.2 or 6.3 of the UNRTDG
(P)	Used in Column 4, Table 1 to refer to marine pollutant
PP	Used in Column 9, Table 1 to refer to the special packing provision applicable to the use of packing instructions bearing the code 'P' in 4.1.4.1 of Part 1 of this Standard
P.P.E.	Personal protective equipment (Column 14, Table 1)
SADT	Self-accelerating decomposition temperature
T	Used in Column 10, Table 1 to refer to the relevant instruction in section 4.2.5 of the UNRTDG specifying the tank type(s) required for the transport of the substance in portable tanks
TP	Used in Column 11, Table 1 to refer to any special provisions indicated in section 4.2.5.3 of the UNRTDG that apply to the transport of the substance in portable tanks

U.E.L.	Upper explosive limit (Column 14, Table 1)
UNRTDG	United Nations Recommendations on the Transport of Dangerous Goods – Model Regulations
Wh	Watt-hour