AS 2809.6—2001
(Incorporating Amendment No. 1)

AS 2809.6—2001

Australian STANDARD

Road tank vehicles for dangerous goods

Part 6: Tankers for cryogenic liquids

STANDARDS Australia

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- Australasian Fire Authorities Council
- Australian Chamber of Commerce and Industry
- The Australian Gas Association
- Australian Industrial Gas Manufacturers Association
- Australian Industry Group
- Australian Institute of Petroleum
- Australian Liquefied Petroleum Gas Association
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- Department for Administration and Information Services, S.A.
- Department of Defence (Australia)
- Environment Protection Authority of N.S.W.
- Queensland Transport
- Victorian WorkCover Authority
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PREFACE

This Standard was prepared by the Standards Australia Committee ME-057, Road Tankers for Hazardous Liquids and Gases. It is complementary to AS 2809.1—1999, *Road tank vehicles for dangerous goods*, Part 1: *General requirements*, and provides requirements that are specifically applicable to road tankers for cryogenic liquids.

This Standard incorporates Amendment No. 1 (December 2013). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The requirements are an amalgamation of material from a number of sources, the most notable being AS 2809.3—1999, *Road tank vehicles for dangerous goods*, Part 3: *Tankers for compressed liquefiable gases*, which provided the basic framework, to which was merged appropriate material from the US DOT regulations, the Compressed Gas Association CGA 341-1987, *Insulated Cargo Tank Specification for Cryogenic Liquids*.

AS 1210—1997, *Pressure vessels*, is referenced for the basic design of the cargo tank, but a number of supplementary requirements are listed to facilitate its application to tankers for cryogenics.

The liquids dealt with in this Standard fall into two broad groups. One comprises those that are mainly derived from the atmosphere; such gases present no great danger other than cold contact if they escape. Another group consists of materials that are more dangerous because of flammability or toxicity characteristics. For this group, greater attention is paid to the engineering of the provisions for escape prevention and control.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for the design and construction of road tankers for the transport of certain listed cryogenic liquids. It provides for vehicles which are specifically designed and constructed as road tankers, or which are conventional trucks provided with transportable tanks for use as tankers. It is complementary to Part 1 (i.e. AS 2809.1).

NOTES:

1 Although carbon dioxide and nitrous oxide are not true cryogenic liquids according to the conventional definition (see Clause 1.6.2), they are dealt with in this Standard as a matter of convenience.

2 Tanks which are carried or towed after filling to a point of use, where they are dismounted or uncoupled before draw-off commences, e.g. portable tanks, are not considered to be tankers to be dealt with by this Standard.

1.2 APPLICATION

Tankers for the transport of cryogenic liquids shall comply with Parts 1 and 6 of AS 2809. Where any requirement of Part 6 differs from a similar requirement in Part 1, Part 6 shall take precedence. Sections 1 and 2 of Part 6 shall apply to all tankers, and Section 3 shall apply additionally where the cargo is flammable or toxic.

NOTE: Carbon monoxide is defined in the ADG Code as being primarily a flammable gas, with toxicity as a subsidiary risk. The approach reflected in this Standard is that the two risks are of equal rank, and that the toxicity risk requires the same design safeguards as the flammability risk.

1.3 NEW DESIGNS AND INNOVATIONS

Any alternative materials, designs, methods of assembly, procedures, and the like which do not comply with specific requirements of this Standard, or are not mentioned in it, but which give equivalent results to those specified, are not necessarily prohibited.

1.4 INTERPRETATIONS

Questions concerning the meaning, application, or effect of any part of this Standard may be referred to Standards Australia Committee ME-057, Road Tankers for Hazardous Liquids and Gases, for explanation. The authority of the Committee is limited to matters of interpretation and it will not adjudicate in disputes.

