

TECHNICAL INFORMATION SHEET 56

TANKS. SAFETY VALVE LABEL REQUIREMENTS

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations ^[1] sets the legal framework for the transport of dangerous goods in Great Britain, implementing the *Agreement Concerning the International Carriage of Dangerous Goods by Road* (ADR) ^[2]. ADR ^[2] sets the legal framework for the packaging and labelling of dangerous goods.

ADR ^[2] 6.8.3.2.9 requires that tanks intended for the carriage of flammable liquefied gases shall be fitted with safety valves. Other tanks intended for the carriage of compressed gases, non-flammable liquefied gases or dissolved gases, may be fitted with safety valves.

ADR ^[2] 6.8.3.2.9.6 sets out the requirements for a safety valve mark.

Tanks for flammable liquefied gases fitted with a safety valve shall display the safety valve mark.

Other tanks, containing compressed gases, non-flammable liquefied gases or dissolved gases, if fitted with a safety valve, shall display the safety valve mark.

Tanks not fitted with a safety valve shall not display the safety valve mark.

Tanks containing refrigerated liquefied gases, including those with flammable properties, shall not display the safety valve mark. This also includes *Multiple Element Gas Containers* (MEGC's) and battery-vehicles, the elements of which are classified as pressure receptacles.

NOTES:

1. ADR ^[2] 2.2.2.1.2 sets out a clear difference between a 'liquefied gas' and a 'refrigerated liquefied gas'.
2. Tanks for a 'liquefied gas' are compliant with ADR ^[2] 6.8.3.2.9. Tanks for a 'refrigerated liquefied gas' are compliant with ADR ^[2] 6.8.3.2.11.

ADR ^[2] 6.8.3.2.9.6.3 & 4 set out the design requirements for a safety valve mark.

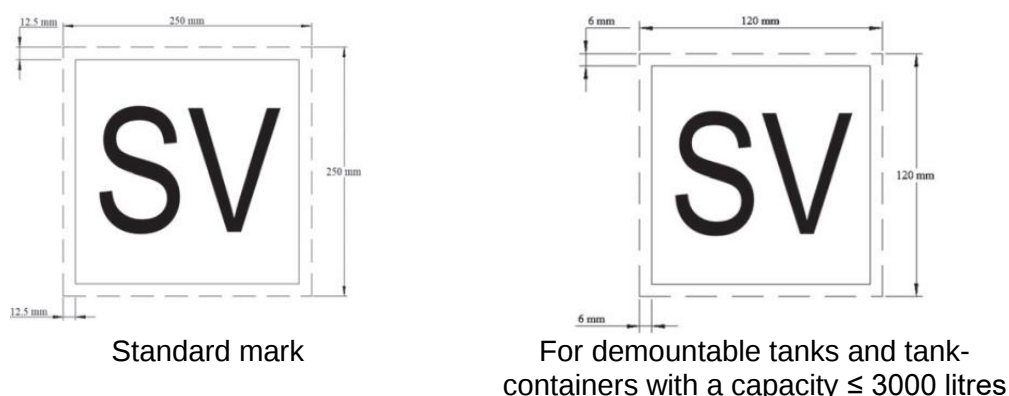


Figure 1: Safety valve mark



ADR ^[2] 6.8.3.2.9.6.5 requires that any material used to produce a label is weather resistant and that the mark is durable. It shall withstand 15 minutes fire engulfment, remaining affixed irrespective of the orientation of the tank. The letters 'SV' shall be indelible and shall remain legible after 15 minutes engulfment in fire.

BS 5609 ^[3], *Specification for printed pressure-sensitive, adhesive-coated labels for marine use, including requirements for label base material*, provides a standard by which labels can be tested for their adhesive properties, as well as resistance to abrasion and sunlight.

Application of a safety mark.

1. For Fixed Tanks (Tank Vehicles).

The (standard) SV mark shall be displayed on both sides and the rear.

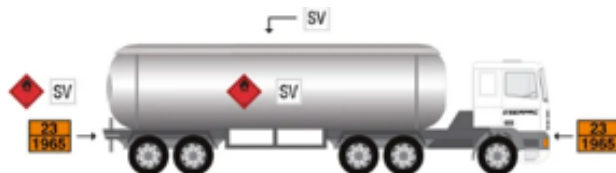
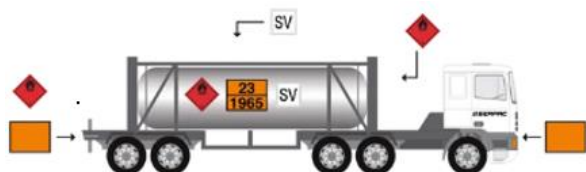


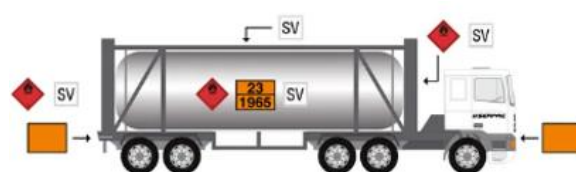
Figure 2: Fixed Tank arrangement

2. For Demountable Tanks and Tank Containers.



≤ 3000 litres

Display on either both sides or on both ends



> 3000 litres

Display on both sides and both ends

Figure 3: Demountable Tank and Tank Container arrangements

Images courtesy of: Hazchem Safety Ltd.

References:

- 1) SI 2009 No 1348, *The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009* (as amended).
- 2) UNECE, *Agreement Concerning the International Carriage of Dangerous Goods by Road* (ADR) (as amended).
- 3) BS 5609, *Specification for printed pressure-sensitive, adhesive-coated labels for marine use, including requirements for label base material*.

For more information:

UK Legislation

United Nations Economic Commission for Europe (UNECE)

British Standards Institute (BSI)

British Compressed Gases Association (BCGA)

www.legislation.gov.uk

<https://unece.org/transport/dangerous-goods>

www.bsigroup.co.uk

www.bcga.co.uk