



Title	GUIDANCE ON SMALL GAS CYLINDERS AND FITTINGS FOR USE IN PAINTBALL SPORTS.
Series	<i>DfT Dangerous Goods Guidance Note #15</i>
Purpose & caveat	This document has been prepared by the DfT to assist those involved in the transport of dangerous goods. It should be noted, however, that it is for the courts, not the DfT, to determine how the provisions of the legislation should be interpreted. This document is not a substitute for reading the provisions of the dangerous goods legislation. Nor is it a substitute for taking independent legal advice in relation to your rights and duties under this legislation. DfT is not responsible for the content or future availability of any external internet links provided in this document.
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Small gas cylinders and fittings for use in paintball sports.

1. INTRODUCTION

- 1.1 This summary has been prepared specifically for the purposes of advising those involved in paintball sports. It refers to the situation in relation to new equipment only. It does not consider wider H & S matters such as Health & Safety at Work etc Act 1974 or Management of Health & Safety at Work Regulations 1999. It is not an authoritative statement of the law.
- 1.2 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 implements in GB the EU Transportable Pressure Equipment Directive (TPED) as well as providing for the application of the European Agreement Concerning the International Transport of Dangerous Goods by Road (ADR) and the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). For convenience only ADR is referenced here. Gas cylinders are just one of the topics covered by this legislation which includes all aspects of the land transport of dangerous goods.
- 1.3 TPED is also a form of trade directive in that equipment which complies may be freely marketed and used in the EU. Its effect in this regard is seen in GB in part 4 of CDG 2007. TPED draws its technical references largely from ADR. ADR applies in countries outside the EU and equipment may be moved through all ADR contracting parties as long as it complies with ADR, even if it is not TPED compliant.

2. Transportable Pressure Equipment (TPE)

- 2.1 For the purposes of this note, TPE is considered to be cylinders and associated fittings that bear on “pressure safety” that are used to move pressurised gases from place to place on the public highway or by rail. Because the great majority of these are frequently refilled, and moved and handled in demanding ways they are expected not only to be made to high standards but also to be maintained and inspected from time to time by a body recognised by the competent authority – in this country, the DfT. There are no lower limits to the size of cylinder, although size and pressure are taken into account in the stringency of the conformity assessment procedures that have to be followed during manufacture.
- 2.2 Cylinders and their fittings may qualify for this duty in several ways (see part 4 of CDG 2007- and from there regulations 51 and 55).

3. Cylinders

- 3.1 To be marketed and filled in the EU cylinders must be subject to the full conformity procedures set out by TPED and the references to ADR. This would lead to the “π” marking of the cylinders. Some of the relevant parts are reproduced in the [annex](#).

4. Fittings (including valves)

- 4.1 Article 10 of TPED refers to valves and cross-references to ADR/RID. See also TPED guidance note 46 which also refers to the use of the “π” mark.
- 4.2 For valves, CDG 2007 at Reg 73(3) makes the only permissible route for compliance to use a standard that is referred to in ADR. The relevant standard is EN ISO 10297: 2006 (previous version 1999). That standard has its own marking requirements, in addition to the “π” mark or “CE” mark.
- 4.3 Accessories, other than valves, which have a direct safety function, are referred to in Regulation 73(4). For conventional gas cylinders, only pressure relief devices fall into this category. Caps or guards used to protect cylinder valves in transport do not require “π” marking, but must comply with EN 962:1996 as amended in 1999 and 2000.

5. Inspection of TPE

- 5.1 CDG 2007 /ADR also provide that no transportable pressure equipment may be used at work or refilled unless the equipment complies with the initial processes and also with the periodic inspection regimes set down in ADR. These can be found in ADR 4.1.4.1 P200 and 6.2.1.6.

6. Summary

- 6.1 To be marketed and used in the EU, cylinders must be made in accordance with TPED and “π” marked. Valves must be made in accordance with EN ISO 10297, and, as with accessories (with a direct safety function), may be “π” marked or “CE” marked (see [para 2 of article 10 of TPED](#)).
- 6.2 Cylinders must also be marked with the identification of the “notified body”.

Annex Extracts from TPED

Article 3

Conformity assessment or the placing on the Community market of new transportable pressure equipment

1. New receptacles and new tanks shall meet the relevant provisions of Directive 94/55/EC and 96/49/EC¹. The compliance of such transportable pressure equipment with these provisions shall be established by a notified body exclusively in accordance with the conformity assessment procedures set out in Annex IV, Part I, and specified in Annex V.
2. New valves and other accessories used for transport shall meet the relevant provisions of the Annexes to Directives 94/55/EC and 96/49/EC.
3. Valves and other accessories having a direct safety function in transportable pressure equipment, in particular safety valves, valves for filling and emptying and cylinder valves, shall be subject to a conformity assessment procedure at least as stringent as that undergone by the receptacle or tank to which they are fitted.
4. Such valves and other accessories used for transport may be subject to a different conformity assessment procedure separate from that used for the receptacle or tank.

Article 10

Marking

1. Without prejudice to the requirements for the marking of receptacles and tanks laid down in Directives 94/55/EC and 96/49/EC, receptacles and tanks satisfying the provisions of Article 3(1) and Article 5(1) shall have a mark affixed to them in accordance with Annex IV, Part I. The form of the mark to be used is set out in Annex VII. This mark shall be visibly and immovably affixed and shall be accompanied by the identification number of the notified body which has performed the conformity assessment procedure on the receptacles and tanks. In the event of reassessment, this mark shall be accompanied by the identification number of the notified or approved body.
2. New valves and other accessories having a direct safety function shall bear either the mark provided for in Annex VII hereto or that provided for in Annex VI to

¹ *These are the Directives which respectively require EU Member States to use ADR for its national legislation for the transport of dangerous goods by road and RID for transport by rail.*

Directive 97/23/EC. Such marks need not be accompanied by the identification number of the notified body which carried out the conformity assessment on the valves and other accessories used for transport.

The other valves and accessories shall not be subject to any special marking requirements.

3. Without prejudice to the requirements for the marking of receptacles and tanks laid down in Directives 94/55/EC and 96/49/EC, for the purposes of periodic inspections, all transportable pressure equipment referred to in Article 6(1) shall bear the identification number of the body which performed the periodic inspection of the equipment to indicate that it may continue to be used.

With regard to gas cylinders covered by Directives 84/525/EEC, 84/526/EEC and 84/527/EEC, when the first periodic inspection is carried out in accordance with this Directive, the aforementioned identification number shall be preceded by the mark described in Annex VII.

4. For both conformity assessment and reassessment and for periodic inspections, the identification number of the notified or approved body shall be visibly and immovably affixed under its responsibility either by the body itself or by the manufacturer, or his authorised representative established within the Community, or by the owner or his authorised representative established in the Community, or by the holder.
5. The affixing of markings on transportable pressure equipment which are likely to mislead third parties with regard to the meaning or the graphics of the mark referred to in this Directive shall be prohibited. Any other marking may be affixed to equipment provided that the visibility and legibility of the marking in Annex VII is not thereby reduced.

Glossary

ADR 2007 European Agreement Concerning the International Transport of Dangerous Goods by Road

<http://www.unece.org/trans/danger/publi/adr/adr2007/07ContentsE.html>

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 (CDG 2007)

<http://www.opsi.gov.uk/si/si2007/20071573.htm>

TPED Council Directive 1999/36 on Transportable Pressure Equipment

<http://ec.europa.eu/transport/tpe/legislation.html>

Guidance notes at

http://ec.europa.eu/transport/tpe/guide_cat_en.html