

Dangerous goods guidance note 3: Fire Extinguishers

Transitional measure

1. Please note that, under ADR 1.6.5.6, all Transport Units may continue to be equipped with fire extinguishers in accordance with the requirements of ADR 2001 until 31 December 2007.

Requirement for main fire extinguishers

2. If a transport unit is not carrying dangerous goods in accordance with ADR 1.1.3.6, it has to be equipped with at least one portable fire extinguisher for the inflammability classes* A, B and C, with a minimum capacity of 2kg dry powder (or an equivalent capacity for any other suitable extinguishing agent) suitable for fighting a fire in the engine or cab of the transport unit [ADR 8.1.4.1(a)].
3. If the transport unit is carrying dangerous goods in accordance with ADR 1.1.3.6, it need be equipped only with a single portable fire extinguisher for the inflammability classes* A, B and C, with a minimum capacity of 2kg dry powder (or an equivalent capacity for any other suitable extinguishing agent) [ADR 8.1.4.2]. The additional fire extinguisher requirements (paras. 4 -) do not apply.
4. If the vehicle is equipped with a fixed fire extinguisher, automatic or easily brought into action for fighting a fire in the engine, the portable extinguisher need not be suitable for fighting a fire in the engine [ADR 8.1.4.3 para. 2].
5. The capacity of the fire extinguisher(s) required under ADR 8.1.4.1(a) may be deducted from the minimum total capacity of the additional fire extinguishers required under 8.1.4.1(b) below [ADR 8.1.4.1(c)].

Requirements for additional fire extinguishers

6. These are set out in ADR 8.1.4.1(b):
 - for transport units with a maximum permissible mass of up to and including 3.5 tonnes:
 - one or more portable fire extinguishers for the inflammability classes* A, B and C with a minimum total capacity of 4 kg dry powder (or an equivalent capacity for any other suitable extinguishing agent)
 - for transport units with a maximum permissible mass of more than 3.5 tonnes up to and including 7.5 tonnes:
 - one or more portable fire extinguishers for the inflammability classes* A, B and C, with a minimum total capacity of 8 kg dry powder (or an equivalent capacity for any other suitable extinguishing agent), of which at least one shall have a minimum capacity of 6 kg
 - for transport units with a permissible maximum mass of >7.5 tonnes:
 - one or more 12kg (or equivalent rating for suitable extinguishing agents) dry powder fire extinguisher for the inflammability classes* A, B and C suitable for fighting a fire in the engine or cab of the vehicle - at least one shall have a minimum capacity of 6kg
7. The requirements for additional fire extinguishers do not apply to transport units carrying dangerous substances of Class 6.2 [ADR 8.5 S3].

Further requirements relating to fire extinguishers

8. These are set out in ADR 8.1.4.3 - 8.1.4.5:

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- The extinguishing agent has to be suitable for use on a vehicle and has to comply with the relevant requirements of BS EN 3 Portable fire extinguishers, Parts 1 to 6 (BS EN 3-1:1996, BS EN 3-2:1996, BS EN 3-3:1994, BS EN 3-4:1996, BS EN 3-5:1996, and BS EN 3-6:1995) [ADR 8.1.4.3, para. 1]**;
 - The extinguishing agent must not be liable to release toxic gases- (a) into the driver's cab; or (b) when under the influence of the heat of a fire. [ADR 8.1.4.3, para. 2];
 - The portable fire extinguishers have to be fitted with a seal verifying that they have not been used. They also have to bear a mark of compliance with a standard** recognized by a competent authority and an inscription at least indicating the date (month, year) of the next recurrent inspection or of the maximum permissible period of use, as applicable. [ADR 8.1.4.4, paras. 1, 2];
 - The fire extinguishers must be periodically inspected in accordance with authorized national standards** in order to guarantee their functional safety. [ADR 8.1.4.4, para. 3];
 - The fire extinguishers have to be installed on the transport units in such a way that (i) the vehicle crew can get at them easily; and, (ii) their operational safety is not affected by the weather.
9. Also, ADR 8.2.2.4.5 requires that, as a minimum, individual practical exercises accompanying theoretical training as part of the initial driver training programme must cover: first aid, fire-fighting, and what to do in case of an accident or incident; and,
10. ADR 8.3.2 requires the vehicle crew to know how to use the fire-fighting appliances.

British Standards

*BS EN:2 1992 Classification of fires (ISBN 0 580 21356 0):

Class A fires involving solid materials, usually of an organic nature, in which combustion normally takes places with the formation of glowing embers

Class B fires involving liquids or liquefiable solids

Class C fires involving gases

Class D fires involving metals

**BS EN:3 1996 Portable fire extinguishers:

BS EN:3-1 1996 Part 1: Description, duration of operation, Class A and B fire test
0 580 25853 X

BS EN:3-2 1996 Part 2:Tightness, dielectric test, tamping test, special provisions
0 580 25854 8

BS EN:3-3 1996 Part 3: Construction, resistance to pressure, mechanical tests
0 580 25855 6

BS EN:3-4 1996 Part 4: Charges, minimum required fire
0 580 25856 4

BS EN:3-5 1996 Part 5: Specification and supplementary tests
0 580 25857 2

BS EN:3-6 1996 Part 6: Provision for the attestation of conformity of portable fire extinguishers in accordance with EN 3 Part 1 to Part 5
0 580 25858 0