#### STATUTORY INSTRUMENTS

## 1991 No. 2097

# **HEALTH AND SAFETY**

# The Packaging of Explosives for Carriage Regulations 1991

Made - - - - 18th September 1991
Laid before Parliament 26th September 1991
Coming into force - - 1st March 1992

The Secretary of State, in exercise of the powers conferred on him by sections 15(1), (2), (3)(a) and (c), (4), and (5), and 82(3)(a) of, and paragraphs 3, 5 and 12 of Schedule 3 to, the Health and Safety at Work etc. Act 1974(1) "the 1974 Act" and of all other powers enabling him in that behalf and for the purpose of giving effect without modifications to proposals submitted to him by the Health and Safety Commission under section 11(2)(d) of the 1974 Act after the carrying out by the said Commission of consultations in accordance with section 50(3) of that Act, hereby makes the following Regulations:—

#### **Short Title and Commencement**

1. These Regulations may be cited as the Packaging of Explosives for Carriage Regulations 1991, and shall come into force on 1st March 1992.

#### Interpretation

- **2.**—(1) In these Regulations, unless the context otherwise requires—
  - "The 1983 Regulations" means the Classification and Labelling of Explosives Regulations 1983(2);
  - "approved testing laboratory" means a testing laboratory—
  - (a) approved by the Secretary of State, or
  - (b) outside Great Britain, approved by the competent authority;
  - "carriage" shall be construed in accordance with paragraph (2) of this regulation;
  - "certificate holder" means the person whose name is included in or identifiable from the UN mark;

<sup>(1) 1974</sup> c. 37; sections 15 and 50 were amended by the Employment Protection Act 1975 (c. 71), Schedule 15, paragraphs 6 and 16 respectively

<sup>(2)</sup> S.I. 1983/1140.

"competent authority" means a person or organisation in any country which is for the time being a competent authority for the purposes of the testing and certification of packagings and the allocation of a UN mark under the United Nations Recommendations;

"Class 1" has the meaning assigned to it by regulation 2(1) of the 1983 Regulations;

"consign" shall be construed in accordance with paragraph (3) of this regulation;

"design type" shall be construed in accordance with paragraph (4) of this regulation;

"the Executive" means the Health and Safety Executive;

"explosives" means explosive articles or explosive substances which—

- (a) have been assigned on classification in accordance with the 1983 Regula tions to Class 1, or
- (b) have not been classified under the 1983 Regulations or under the Classification, Packaging and Labelling of Dangerous Substances Regulations 1984(3);

"explosive article" means an article containing one or more explosive substance;

"explosive substance" means—

- (a) a solid or liquid substance, or
- (b) a mixture of solid or liquid substances or both,

which is capable by chemical reaction in itself of producing gas at such a temperature and pressure and at such a speed as could cause damage to surroundings or which is designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as a result of non-detonative self-sustaining exothermic chemical reactions;

"fireworks" means the explosive articles allocated on classification under the 1983 Regulations any of the UN Numbers 0333 to 0337;

"inner packagings" means the packagings immediately surrounding any explosives except when they are the only packagings;

"military explosive" has the meaning assigned to it by regulation 2(1) of the 1983 Regulations;

"net mass" means—

- (a) where a package has outer packagings only, the net mass of the contents, and
- (b) where the package has inner packagings and outer packagings, the combined mass of the contents and the inner packagings;

"outer packagings" means the packagings immediately surrounding any explosives where it is the only packagings and in any other case the outermost packagings;

"package" means the packagings and their contents prepared for carriage;

"packagings" means any receptacle and any closure or fastening and any components, materials or wrappings which have the purpose of enabling the packagings to perform their containment function, but does not include—

- (a) any envelope, case or contrivance forming part of an article, or
- (b) any type of cradle, crate, freight container, aircraft container, container with integral pallet, aircraft pallet or vehicle;

"small arms ammunition" means the explosive articles allocated on classification under the 1983 Regulations the UN Numbers 0012, 0014 or 0055 and which are intended exclusively for use in small arms;

"UN mark" means a mark allocated by the competent authority being a mark specified in the United Nations Recommendations to indicate that the packagings which bear it:—

- (a) correspond with a design type which has been tested successfully in accordance with, and
- (b) comply with the provisions relating to manufacture required by,

the United Nations Recommendations.

"UN Number" means United Nations Serial Number, that is to say, one of the four digit numbers devised by the United Nations and allocated by the Health and Safety Executive or the Secretary of State to an explosive article or explosive substance as a means of identification;

"unit load" means the unit formed when packages or unpackaged articles are assembled on or in a device which enables them to be mechanically handled as one unit, but which is not any type of freight container, aircraft container, container with integral pallet, aircraft pallet, or vehicle;

"unit load container" means a unit load containing military explosives the net mass of which, treating the unit load container as a single package, is greater than 400 kg which is designed to simplify handling of the explosives in it and to make them available for use quickly;

"the United Nations Recommendations" means the United Nations Recommenda tions on the Transport of Dangerous Goods based on those originally prepared by the United Nations Committee of Experts on the Transport of Dangerous Goods considered by the Economic and Social Council at its twenty-third session (Resolution 645 G (XXIII) of 26th April 1957) being either—

- (i) the seventh revised edition(4), or
- (ii) a later edition (which shall include any revision or partial substitution and any such edition, revision or substitution as it has effect subject to any reservation made by or on behalf of the United Kingdom) approved from time to time by the Secretary of State which shall be in substitution for and not an alternative to the seventh revised edition.
- (2) When explosives are carried in or on a vehicle or vessel (which shall include a freight container attached to a vehicle or vessel), they shall, for the purposes of these Regulations, be deemed to be carried from the time they are placed in or on the vehicle or vessel for the purposes of carriage until they are removed from the vehicle or vessel.
- (3) For the purpose of these Regulations, a person shall be taken to consign explosives for carriage whether he does so as principal or as agent for another.
- (4) For the purposes of these Regulations, packagings are of the same design type if they conform in every respect, including design, size, material, thickness and manner of construction, with the specification of packagings which have satisfactorily completed tests and have been allocated a UN mark or if they differ only in having a different surface treatment.
- (5) For the purposes of these Regulations, a unit load container shall be treated as a single package but any other unit load shall not be so treated and the device on or in which packages or unpackaged articles are assembled in a unit load other than a unit load container shall not be treated as packagings.
- (6) Unless the context otherwise requires, any reference in these Regulations to a numbered regulation or schedule is a reference to the regulation or schedule in these Regulations so numbered.

#### Application

- 3.—(1) These Regulations shall not apply to—
  - (a) any explosive nuclear device;
  - (b) explosives carried or consigned for carriage for the purpose of explosive ordnance disposal, other than dumping at sea, under the direction of a member of Her Majesty's

forces, a member of a police force or a person authorised by the Secretary of State for Defence;

- (c) explosive articles of Class 1 which—
  - (i) have a substantial outer casing so made and closed (if necessary) as to prevent any explosive substance escaping;
  - (ii) either have satisfactorily completed tests carried out at a laboratory approved by the Secretary of State to show that they are robust enough to be carried without packaging and are the subject of written notification to the Executive to that effect or were manufactured before 1st September 1992 and are accompanied by a certificate to that effect;
  - (iii) are loaded in such a way (including the use of restraining devices where appropriate) that they are safe and will not become loose when subjected to normal conditions of carriage,
  - (iv) are adequately protected against theft, and
  - (v) satisfy conditions approved by the Executive;
- (d) explosives carried in the circumstances mentioned in sections 61 or 74 of the Explosives Act 1875(5) or section 29 of the Consumer Protection Act 1987(6);
- (e) explosives carried by hand;
- (f) explosives carried by air or sea.
- (2) Regulations 7 to 9 and 11 shall not apply to explosives which are carried or consigned for carriage—
  - (a) within private premises;
  - (b) between one part of private premises and another in the immediate vicinity.
- (3) Regulations 7 to 9 and 11 shall not apply to explosives carried or consigned for carriage with a view to being exploded by the carrier or consignor or the employees of one of them in the course of their employment and not for sale where—
  - (a) the explosive is of a class and division and of a form listed in columns 2 and 3 respectively of Part I of Schedule 1; and
  - (b) the net mass carried in any load does not exceed 50 kg; and
  - (c) the net mass within any item in Part I of Schedule 1 does not exceed the amount specified in column 4 of that Schedule for explosives within that item.
  - (4) Regulations 7 to 9 and 11 shall not apply to—
    - (a) explosives in a package which are being transhipped from one aircraft, vessel or hovercraft to another for the purpose of being carried to a place outside the United Kingdom provided that there is compliance with the appropriate packaging provisions of the International Maritime Dangerous Goods Code(7) or the Technical Instructions for the Safe Transport of Dangerous Goods by Air(8), both as revised or re-issued from time to time and published respectively by the International Maritime Organisation and the Council of the International Civil Aviation Organisation;
    - (b) explosives carried or consigned for carriage on or in connection with an international transport operation within the meaning of the Convention concerning International

<sup>(</sup>**5**) 1875 c. 17.

<sup>(6) 1987</sup> c. 43.

<sup>(7)</sup> Volumes I to IV, ISBN 92 801 1243 0; Volume V, ISBN 92 801 1248 1; both for the edition current when these Regulations were made

<sup>(8)</sup> ISBN 92 9035 274 4; for the edition current when these Regulations were made.

- Carriage by Rail (COTIF)(9) as revised or re-issued from time to time where such carriage conforms in every respect to the provisions of the Uniform Rules concerning the Contract for International Carriage of Goods by Rail (CIM) which forms Appendix B to that Convention and to the regulations (RID) made thereunder(10);
- (c) explosives carried or consigned for carriage on or in connection with an international transport operation within the meaning of the European Agree ment concerning the International Carriage of Dangerous Goods by Road (ADR)(11) signed at Geneva on 30th September 1957 or any revision or replacement for the time being in force and the carriage complies with the provisions of Annexes A and B to that Agreement;
- (d) explosives of net mass not exceeding 10 kg which have not been classified under the 1983 Regulations and which are carried solely in connection with an application for such classification;
- (e) explosives carried or consigned for carriage for the purpose of explosive ordnance disposal by dumping at sea under the direction of a person authorised by the Secretary of State for Defence;
- (f) the explosives listed in Part II of Schedule 1 where the net mass carried in any load does not exceed 50 kg and the explosives are not carried or consigned for carriage with a view to their use by a person at work or their sale.
- (5) Regulations 7 to 9 shall not apply to explosives carried by members, acting in the course of their duties, of Her Majesty's forces or of visiting forces within the meaning of any of the provisions of Part I of the Visiting Forces Act 1952(12) where the explosives are carried from a firing range.
  - (6) Regulations 8, 9 and 11 shall not apply to explosives carried for the purpose of any tests—
    - (a) necessary to satisfy any conditions mentioned in regulation 3(1)(c), or
    - (b) mentioned in regulations 8(a) or 11,

where the quantity of explosive carried is no more than is necessary for the purpose.

#### **Packaging of Explosives**

- **4.**—(1) No person shall consign explosives for carriage unless they are in packagings which comply with these Regulations.
- (2) No person shall knowingly carry explosives unless they are in packagings which comply with these Regulations.
- (3) For the purposes of paragraph (2) of this regulation, packagings shall be taken to comply with regulations 7, 8 and 9 if—
  - (a) they are marked with a UN mark; and
  - (b) the person carrying the explosives does not know and has no reason to believe either—
    - (i) that the packagings are not of the design type indicated by the UN mark, or
    - (ii) that the explosives are not of a quantity and description which by these Regulations may be carried in packagings of the design type indicated by the UN mark.
- (4) All packagings used in or in connection with the carriage of explosives shall be adequately maintained.

<sup>(9)</sup> Cmnd 8535.

<sup>(10)</sup> ISBN 0 11 550913 5; for the edition current when these Regulations were made.

<sup>(11)</sup> ISBN 0 11 550901 1; for the edition current when these Regulations were made.

<sup>(12) 1952</sup> c. 67.

#### Design and construction of packagings

- 5.—(1) All packagings shall be so designed and constructed that—
  - (a) they will—
    - (i) protect the explosives,
    - (ii) prevent the explosives escaping, and
    - (iii) cause no increase in the risk of unintended ignition,
    - when subjected to normal conditions of carriage including foreseeable changes in temperature, humidity and pressure;
  - (b) the complete package can be handled safely in normal conditions of carriage;
  - (c) the packagings will withstand any loading imposed on them by foreseeable stacking to which they will be subject during carriage so that they do not add to the risk presented by the explosives, the packagings' containment function is not harmed, and they are not distorted in a way or to an extent which will reduce their strength or cause instability of a stack;
  - (d) any inner packagings and the interior of all outer packagings are free from grit or rust;
  - (e) they do not contain or have attached to them any incompatible material, that is to say any material which, if it came into contact with the explosive substance would be capable of reacting with the explosive substance in a way which would increase the risk of unintended ignition.
- (2) It is hereby declared that any requirement mentioned in paragraph (1) of this regulation which falls within any more general requirement mentioned therein is without prejudice to the more general requirement.

#### Materials used in packagings

**6.** All packagings shall be of materials which are suitable for their purpose and which are so designed and of sufficient quality as to allow explosives to be carried safely and which are compatible with the explosives to be carried.

#### Method of packing packages of net mass not exceeding 400 kg

7. Explosives to be packed in a package of net mass not exceeding 400 kg shall be packed by the method specified for explosives of that UN number in the United Nations Recommendations (including compliance with all recommendations or requirements relevant to the use of that method for explosives of that UN Number).

#### Testing and certification of design types

- **8.** All packagings used for packages of explosives of net mass not exceeding 400 kg shall be of a design type which:—
  - (a) has been tested by an approved testing laboratory using tests approved by the competent authority, and
  - (b) the competent authority has certified as having satisfactorily completed such tests and to which he has allocated a UN mark.

#### Marking of packages of net mass not exceeding 400 kg

**9.** All packages of explosives of net mass not exceeding 400 kg shall be marked with the UN mark allocated by the competent authority for that design type of packaging.

#### Use of marks on packagings

- **10.**—(1) No person shall mark any packagings with a UN mark or any mark likely to be mistaken for a UN mark otherwise than by marking packagings with the UN mark allocated by the competent authority for that design type of packagings.
- (2) No person shall mark any packagings with a UN Mark other than with the authority of the certificate holder.
- (3) No person shall mark any packagings with a mark required by regulation 11(2) or any mark likely to be mistaken for such a mark otherwise than by marking packagings with the correct particulars required by that regulation for those packagings.

#### Packaging of explosives of net mass more than 400 kg

- 11.—(1) All packagings used for packages of explosives of net mass greater than 400 kg shall either—
  - (a) (i) have been successfully tested at a laboratory approved by the Secretary of State in accordance with standards approved by the Executive, and
    - (ii) be registered with the Executive or the Secretary of State for Defence, or
- (b) have been tested to the satisfaction of a competent authority outside Great Britain; and shall be marked with the particulars specified in Schedule 2.
- (2) This regulation shall not apply to any package of explosives which was prepared before 1st September 1992 and which is accompanied by a certificate to that effect.

#### **Enforcement**

12. Notwithstanding the provisions of the Health and Safety (Enforcing Authority) Regulations 1989(13), the enforcing authority for the purposes of these Regulations shall in all cases be the Executive.

#### **Certificates of exemption**

- 13.—(1) Subject to paragraph (2) of this regulation, the Executive may, by a certificate in writing, exempt any person, explosives, package or packagings, or any class of person, explosives, package or packagings, from all or any of the requirements or prohibitions imposed by these Regulations and any such exemption may be granted subject to conditions and to a time limit and may be revoked by a certificate in writing at any time.
- (2) The Executive shall not grant any such exemption unless, having regard to the circumstances of the case and in particular to—
  - (a) the conditions, if any, which it proposes to attach to the exemption; and
- (b) any other requirements imposed by or under any enactment which apply to the case, it is satisfied that neither the health and safety of persons who are likely to be affected by the exemption nor the security of the explosives will be prejudiced.
- (3) The Secretary of State having responsibility for defence may in the interests of national security exempt by a certificate in writing any:—
  - (a) military explosive;
  - (b) person engaged in the packaging of military explosive;
  - (c) packagings used for military explosives;

(d) class of any of the foregoing,

from all or any of the requirements or prohibitions imposed by these Regulations and any such exemption may be granted subject to conditions and to a time limit and may be revoked by a certificate in writing at any time.

#### Saving repeals and revocations

- **14.**—(1) Nothing in these Regulations shall be construed as affecting any requirement imposed by virtue of the 1983 Regulations.
- (2) Sections 33 and 40(3) of the Explosives Act 1875 are repealed except in their application to Northern Ireland.
- (3) The instruments specified in column 1 of Schedule 3 are revoked to the extent specified in column 3 of that Schedule except in their application to Northern Ireland.

Signed by authority of the Secretary of State for Transport

Christopher Chope
Parliamentary Under Secretary of State,
Department of Transport

18th September 1991

#### SCHEDULE 1

Regulation 3

#### EXPLOSIVES TO WHICH REGULATIONS 7 TO 9 AND 11 ARE NOT APPLICABLE

#### PART I

# EXPLOSIVES WHICH ARE CARRIED OR CONSIGNED FOR CARRIAGE WITH A VIEW TO BEING EXPLODED BY THE CARRIER OR CONSIGNOR OR THE EMPLOYEES OF ONE OF THEM IN THE COURSE OF THEIR EMPLOYMENT AND NOT FOR SALE

Item	Description and Classification of Explosive		Maximum Net Mass
	Class and Division	Form and	
1	2	Compatibility Group 3	4
(a)	1.1	Substances of G	1 kg
(b)	1.1	Articles or Substances of B	10 kg
(c)	1.1	Articles or Substances of C, D, or L	50 kg
		Articles of E, F, G or J	50 kg
	1.2	Any	50 kg
	1.3	Any	50 kg
1.4	Articles or Substances of B,C, D, E, F, G or S	50 kg	
	1.5	Articles or Substances of D	50 kg

#### PART II

# EXPLOSIVES WHICH ARE NOT CARRIED OR CONSIGNED FOR CARRIAGE WITH A VIEW TO THEIR BEING USED BY A PERSON AT WORK OR, THEIR SALE

Explosive	UN Number
ARTICLES, PYROTECHNIC	0428
ARTICLES, PYROTECHNIC	0429
ARTICLES, PYROTECHNIC	0430
ARTICLES, PYROTECHNIC	0431
ARTICLES, PYROTECHNIC	0432

Explosive	UN Number
BLACK POWDER (GUNPOWDER)	0027
CARTRIDGES FOR WEAPONS (CARTRIDGES, SMALL ARMS)	0012
CARTRIDGES FOR WEAPONS (CARTRIDGES, SMALL ARMS, BLANK)	0014
CASES, CARTRIDGE, EMPTY, WITH PRIMER	0055
FIREWORKS	0333
FIREWORKS	0334
FIREWORKS	0335
FIREWORKS	0336
FIREWORKS	0337
FLARES, AERIAL	0093
FLARES, AERIAL	0403
FLARES, AERIAL	0404
FLARES, AERIAL	0421
FLARES, SURFACE	0092
FLARES, SURFACE	0418
POWDER, SMOKELESS	0160
POWDER, SMOKELESS	0161
PRIMERS, CAP TYPE	0044
PRIMERS, CAP TYPE	0377
PRIMERS, CAP TYPE	0378
ROCKETS, LINE THROWING	0238
ROCKETS, LINE THROWING	0240
ROCKETS, LINE THROWING	0453
SIGNAL DEVICES, HAND	0191
SIGNAL DEVICES, HAND	0373
SIGNALS, DISTRESS	0194
SIGNALS, DISTRESS	0195

SCHEDULE 2

Regulation 11

### PARTICULARS TO BE MARKED ON PACKAGES OF NET MASS OVER 400 kg

**1.** The words "Approved by the competent authority of" followed by the distinguishing sign for motor vehicles in international traffic of the state of the competent authority.

Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

- **2.** The date on which the competent authority confirmed the packagings satisfied the tests required by these Regulations.
  - **3.** Any registration number issued by the competent authority to the packagings.

#### SCHEDULE 3

Regulation 14

#### REVOCATIONS

1. Title of Instrument	2. Reference	3. Extent of Revocation
The Packing of Explosive for Conveyance Rules 1949	S.I.1949/798	The entire instrument.
The Packing of Explosive for Conveyance Rules 1951	S.I. 1951/868	The entire instrument
The Explosives Act 1875 etc. (Metrication and Miscellaneous Amendment) Regulation 1984	S.I. 1984/510	In regulation 1(2), sub-paragraph (c); In regulation 3—  (i) the word "either", (ii) in sub –paragraph (a) the word "or", and (iii) sub –paragraph (b).

#### **EXPLANATORY NOTE**

(This note is not part of the Regulations)

These Regulations make new provision for the packaging of explosives for carriage by all means of transport subject to exceptions set out in regulation 3 and Schedule 1.

By regulation 4 no person may consign explosives for carriage, or knowingly carry explosives, unless they are in packagings which comply with the Regulations.

Specific requirements as to the design and construction of, and materials used in, packagings are set out in regulations 5 and 6.

Packagings containing not more than 400 kg of explosives must be packaged in accordance with a method prescribed for those explosives in the United Nations Recommendations— Regulation 7. This is the 7th revised edition of the United Nations Recommendations on the Transport of Dangerous Goods. The Secretary of State may approve a later edition in substitution for the 7th revised edition— Regulation 2(1).

Systems are established for the testing and marking of packagings— Regulations 8 to 11 and Schedule 2.

Regulations 12 and 13 provide for enforcement and powers to grant exemptions. Repeals, revocations and savings are dealt with by Regulation 14 and Schedule 3.

Copies of documents referred to in these Regulations may be obtained as follows:—

- (a) The United Nations Recommendations (Regulation 2(1) and 7), the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) (Regulation 3(4)(c)), the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) (Regulation 3(4)(b)), the Convention concerning International Carriage by Rail (COTIF) (Regulation 3(4)(b)) and the Uniform Rules concerning the Contract for International Carriage of Goods by Rail (CIM) (Regulation 3(4)(b)) from Her Majesty's Stationery Office, Publications Centre, PO Box 276, London SW8 5DT, or from one of Her Majesty's Stationery Office Bookshops;
- (b) the International Maritime Dangerous Goods Code, (Regulation 3(4)(a)) from the International Maritime Organisation, 4 Albert Embankment, London SE1 7SR;
- (c) the Technical Instructions for the Safe Transport of Dangerous Goods by Air (1991–92 English language edition) (Regulation 3(4)(a)) from either Freight Merchandising Services c/o Vidap Freight Services Ltd, Green Lane, Hounslow, Middlesex TW4 6DD or IAL—International Aeradio Plc, Aeradio House, Hayes Road, Southall, Middlesex UB2 5NJ.

The conditions mentioned in Regulation 3(1)(c)(v) and the standards mentioned in Regulation 11(1) (a)(i) are available from the Health and Safety Executive, Baynards House, 1 Chepstow Place, Westbourne Grove, London W2 4TF.