

## Chapter 3.5

### *Dangerous goods packed in excepted quantities*

#### 3.5.1 Excepted quantities

3.5.1.1 Excepted quantities of dangerous goods of certain classes, other than articles, meeting the provisions of this chapter, are not subject to any other provisions of this Code except for:

- .1 The training provisions in chapter 1.3;
- .2 The classification procedures and packing group criteria in Part 2, Classification;
- .3 The packaging provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4, 4.1.1.4.1 and 4.1.1.6 in Part 4; and
- .4 The provisions for documentation specified in chapter 5.4.

**Note:** In the case of radioactive material, the provisions for radioactive material in excepted packages in 1.5.1.5 apply.

3.5.1.2 Dangerous goods which may be carried as excepted quantities in accordance with the provisions of this chapter are shown in column 7b of the Dangerous Goods List by means of an alphanumeric code as follows:

Code	Maximum net quantity per inner packaging (in grams for solids and mL for liquids and gases)	Maximum net quantity per outer packaging (in grams for solids and mL for liquids and gases, or sum of grams and mL in the case of mixed packaging)
E0	Not permitted as excepted quantity	
E1	30	1,000
E2	30	500
E3	30	300
E4	1	500
E5	1	300

For gases, the volume indicated for inner packagings refers to the water capacity of the inner receptacle and the volume indicated for outer packagings refers to the combined water capacity of all inner packagings within a single outer packaging.

3.5.1.3 Where dangerous goods in excepted quantities for which different codes are assigned are packaged together, the total quantity per outer packaging shall be limited to that corresponding to the most restrictive code.

3.5.1.4 Excepted quantities of dangerous goods assigned to codes E1, E2, E4 and E5 are not subject to the provisions of this Code provided that:

- .1 The maximum net quantity of material per inner packaging is limited to 1 mL for liquids and gases and 1 g for solids;
- .2 The provisions of 3.5.2 are met, except that an intermediate packaging is not required if the inner packagings are securely packed in an outer packaging with cushioning material in such a way that, under normal conditions of transport, they cannot break, be punctured, or leak their contents; and for liquid dangerous goods, the outer packaging contains sufficient absorbent material to absorb the entire contents of the inner packagings;
- .3 The provisions of 3.5.3 are complied with; and
- .4 The maximum net quantity of dangerous goods per outer packaging does not exceed 100 g for solids or 100 mL for liquids and gases.

## 3.5.2 Packagings

3.5.2.1 Packagings used for the transport of dangerous goods in excepted quantities shall be in compliance with the following:

- .1 There shall be an inner packaging and each inner packaging shall be constructed of plastic (when used for liquid dangerous goods it shall have a thickness of not less than 0.2 mm), or of glass, porcelain, stoneware, earthenware or metal (see also 4.1.1.2) and the closure of each inner packaging shall be held securely in place with wire, tape or other positive means; any receptacle having a neck with moulded screw threads shall have a leakproof threaded-type cap. The closure shall be resistant to the contents;
- .2 Each inner packaging shall be securely packed in an intermediate packaging with cushioning material in such a way that, under normal conditions of transport, they cannot break, be punctured or leak their contents. For liquid dangerous goods, the intermediate or outer packaging shall contain sufficient absorbent material to absorb the entire contents of the inner packagings. When placed in the intermediate packaging, the absorbent material may be the cushioning material. Dangerous goods shall not react dangerously with cushioning, absorbent material and packaging material or reduce the integrity or function of the materials. Regardless of its orientation, the package shall completely contain the contents in case of breakage or leakage;
- .3 The intermediate packaging shall be securely packed in a strong, rigid outer packaging (wooden, fibre-board or other equally strong material);
- .4 Each package type shall be in compliance with the provisions in 3.5.3;
- .5 Each package shall be of such a size that there is adequate space to apply all necessary marks; and
- .6 Overpacks may be used and may also contain packages of dangerous goods or goods not subject to the provisions of this Code.

## 3.5.3 Tests for packages

3.5.3.1 The complete package as prepared for transport, with inner packagings filled to not less than 95% of their capacity for solids or 98% for liquids, shall be capable of withstanding, as demonstrated by testing which is appropriately documented, without breakage or leakage of any inner packaging and without significant reduction in effectiveness:

- .1 Drops onto a rigid, non-resilient flat and horizontal surface from a height of 1.8 m:
  - (i) Where the sample is in the shape of a box, it shall be dropped in each of the following orientations:
    - flat on the base;
    - flat on the top;
    - flat on the longest side;
    - flat on the shortest side;
    - on a corner
  - (ii) Where the sample is in the shape of a drum, it shall be dropped in each of the following orientations:
    - diagonally on the top chime, with the centre of gravity directly above the point of impact;
    - diagonally on the base chime;
    - flat on the side.

**Note:** Each of the above drops may be performed on different but identical packages.

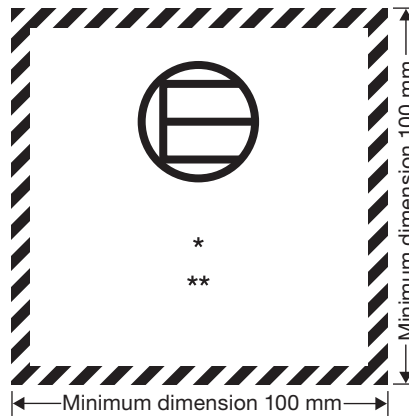
- .2 A force applied to the top surface for a duration of 24 h, equivalent to the total weight of identical packages if stacked to a height of 3 m (including the sample).

3.5.3.2 For the purposes of testing, the substances to be transported in the packaging may be replaced by other substances except where this would invalidate the results of the tests. For solids, when another substance is used, it shall have the same physical characteristics (mass, grain size, etc.) as the substance to be carried. In the drop tests for liquids, when another substance is used, its relative density (specific gravity) and viscosity shall be similar to those of the substance to be transported.

## 3.5.4 Marking of packages

3.5.4.1 Packages containing excepted quantities of dangerous goods prepared in accordance with this chapter shall be durably and legibly marked with the mark shown below. The primary hazard class of each of the dangerous goods contained in the package shall be shown in the mark. Where the name of the consignor or consignee is not shown elsewhere on the package, this information shall be included within the mark.

## 3.5.4.2



Excepted quantities mark

\* The class or, when assigned, the division number(s) shall be shown in this location.

\*\* The name of the consignor or of the consignee shall be shown in this location if not shown elsewhere on the package.

The mark shall be in the form of a square. The hatching and symbol shall be of the same colour, black or red, on white or suitable contrasting background. The minimum dimensions shall be 100 mm × 100 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

## 3.5.4.3

When packages containing dangerous goods packed in excepted quantities are placed in an overpack or in a unit load, the overpack or the unit load shall be marked with the mark required by this chapter unless the marks representative of all dangerous goods in the overpack or the unit load are visible. In addition, an overpack shall be marked with the word “OVERPACK” unless marks representative of all dangerous goods, as required by this chapter, in the overpack are visible. The lettering of the “OVERPACK” mark shall be at least 12 mm high. The other provisions of 5.1.2.1 apply only if other dangerous goods which are not packed in excepted quantities are contained in the overpack or in a unit load and only in relation to these other dangerous goods.

## 3.5.5 Maximum number of packages in any cargo transport unit

## 3.5.5.1

The number of packages containing dangerous goods packed in excepted quantities in any cargo transport unit shall not exceed 1,000.

## 3.5.6 Documentation

## △ 3.5.6.1

In addition to the provisions for documentation specified in chapter 5.4, the words “dangerous goods in excepted quantities” and the number of packages shall be included on the dangerous goods transport document together with the description of the shipment.

## 3.5.7 Stowage

## 3.5.7.1

Dangerous goods packed in excepted quantity are allocated stowage category A as defined in 7.1.3.2. The other stowage provisions indicated in column 16a of the Dangerous Goods List are not applicable.

## 3.5.8 Segregation

## 3.5.8.1

The segregation provisions of chapters 7.2 to 7.7, including the segregation provisions in column 16b of the Dangerous Goods List, are not applicable for packagings containing dangerous goods packed in excepted quantities or in relation to other dangerous goods.

## 3.5.8.2

The segregation provisions of chapters 7.2 to 7.7, including the segregation provisions in column 16b of the Dangerous Goods List, are not applicable for different dangerous goods in excepted quantities in the same outer packaging provided that they do not react dangerously with each other (see 4.1.1.6).

Chapter 3.4 - Dangerous Goods Packed in Limited Quantities