

**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 ADN except for:

- (a) The training requirements in Chapter 1.3;
- (b) The classification procedures and packing group criteria in Part 2;
- (c) The packaging requirements of 4.1.1.1, 4.1.1.2, 4.1.1.4 and 4.1.1.6 of ADR.

**NOTE:** *In the case of radioactive material, the requirements for radioactive material in excepted packages in 1.7.1.5 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 Table A of Chapter 3.2 list by means of an alphanumeric code as follows:

<b>Code</b>	<b>Maximum net quantity per inner packaging</b> (in grams for solids and ml for liquids and gases)	<b>Maximum net quantity per outer packaging</b> (in grams for solids and ml for liquids and gases, or sum of grams and ml in the case of mixed packing)
E0	Not permitted as Excepted Quantity	
E1	30	1000
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.

**3.5.2 Packagings**

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

- (a) There shall be an inner packaging and each inner packaging shall be constructed of plastic (with a minimum thickness of 0.2 mm when used for liquids), or of glass, porcelain, stoneware, earthenware or metal (see also 4.1.1.2 of ADR) 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 leak proof threaded type cap. The closure shall be resistant to the contents;
- (b) Each inner packaging shall be securely packed in an intermediate packaging with cushioning material in such a way that, under normal conditions of carriage, they cannot break, be punctured or leak their contents. The intermediate packaging shall completely contain the contents in case of breakage or leakage, regardless of package orientation. For liquids, the intermediate packaging shall contain sufficient absorbent material to absorb the entire contents of the inner packaging. In such cases, 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;
- (c) The intermediate packaging shall be securely packed in a strong, rigid outer packaging (wooden, fibreboard or other equally strong material);
- (d) Each package type shall be in compliance with the provisions in 3.5.3;
- (e) Each package shall be of such a size that there is adequate space to apply all necessary markings; and
- (f) Overpacks may be used and may also contain packages of dangerous goods or goods not subject to the requirements of ADN.

### 3.5.3 Tests for packages

3.5.3.1 The complete package as prepared for carriage, 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:

- (a) 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.*

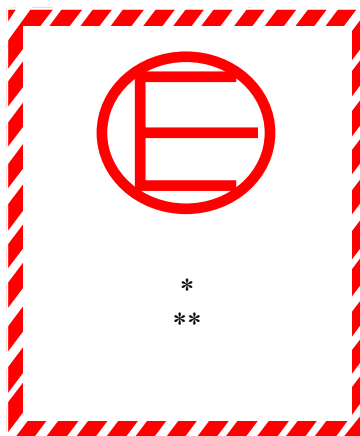
- (b) A force applied to the top surface for a duration of 24 hours, equivalent to the total weight of identical packages if stacked to a height of 3 m (including the sample).

3.5.3.2 For the purposes of testing, the substances to be carried 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 must 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 should be similar to those of the substance to be carried.

### 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 in 3.5.4.2. The first or only label number indicated in column (5) of Table A of Chapter 3.2 for 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 The dimensions of the mark shall be a minimum of 100 mm × 100 mm.



Excepted quantities mark

Hatching and symbol of the same colour, black or red,  
on white or suitable contrasting background

\* The first or only label number indicated in column (5) of Table A of Chapter 3.2 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.

3.5.4.3 An overpack containing dangerous goods in excepted quantities shall display the markings required by 3.5.4.1, unless such markings on packages within the overpack are clearly visible.

### 3.5.5 Maximum number of packages in any vehicle, wagon or container

The number of packages in any vehicle, wagon or container shall not exceed 1 000.

**3.5.6 Documentation**

If a document or documents (such as a bill of lading, air waybill or CMR/CIM consignment note) accompanies(y) dangerous goods in excepted quantities, at least one of these documents shall include the statement “Dangerous Goods in Excepted Quantities” and indicate the number of packages.