

LICENCE FOR DESIGNS OF PACKAGINGS FOR THE CARRIAGE OF DANGEROUS GOODS

1 Legal Basis

Dangerous Goods Carriage Law - Federal Law Gazette I No. 145/1998 in the version of Federal Law Gazette I No. 108/1999.

Roads with public traffic:

Enclosures A and B of Directive 94/55/EC in the version of Directive 1999/47/EC; Federal Law Gazette No. 522/1973 in the version of the revision of the enclosures A and B, Federal Law Gazette III No. 133/1999.

Railroad:

Enclosure of Directive 96/49/EC in the version of Directive 1999/48/EC; Federal Law Gazette No. 137/1967, in the version of the revision Federal Law Gazette III No. 13/1999.

Waterroutes:

Federal Law Gazette I No. 62/1997, in the version of Federal Law Gazette I No. 9/1998 and Federal Law Gazette II No. 295/1997 in the version of the revision Federal Law Gazette II No. 96/1999.

Transport by sea:

Federal Law Gazette No. 387/1996, with IMDG-Code, Amendment 29-98.

Civil Aviation:

Federal Law Gazette No. 97/1949, with ICAO-TI, Edition 1999-2000.

in connection with:

State-accreditation of the Austrian Institute for Packaging (ÖIV) as testing laboratory by the Republic of Austria, Federal Ministry for Economical Affairs (notification of 1995-12-29, Zl.92714/501-IX/2/95).

Notification of the Republic of Austria, Federal Ministry of Transport, Section IV, concerning the allocation of a short marking to identify packagings which have been tested by the ÖIV in accordance with Federal Law Gazette No. 143/1981 (Notification of 1981-09-21, Zl. 75.170/1-IV/6-81).

2 Applicant

3 Packaging Manufacturer

4 Description of the Packaging Designs

No-Nail® boxes with body and end panels made of plywood (6 mm thick), grade to be "C" Quality Birch or equivalent; plywood body panels riveted together using galvanised tinplate and then stitched at each edge and along the centre line with cold rolled annealed galvanised steel; each end panel has 4 off lugs (one on each edge) for locating into slots in the body metals, these being then bent back on themselves to form a fully enclosed rigid box; in the box a bag made of polyethylene, filled with absorbent material („Vermiculite") and closed with a plastic self adhesive tape (50 mm wide);

4.1 Design „Box size 1 - 980 x 580 x 485 mm“

Box closure: locating the side lugs and five lid closure lugs into the appropriate slots and bending them back on themselves; additionally the box is strapped with three bands (made of steel, 16 mm wide) parallel to the broad side edges;

Outside dimensions: 995 x 595 x 500 mm (L x B x H);

Inner Packagings: six 4.0-l-glass bottles (outside diameter: 159 mm; height <incl. closure>: 344 mm; maximum gross mass of one filled inner packaging: 13.25 kg) with plastic screw closure;

Maximum gross mass of the filled and sealed package: 89 kg;

4.2 Design „Box size 2 - 780 x 580 x 485 mm“

Box closure: locating the side lugs and five lid closure lugs into the appropriate slots and bending them back on themselves; additionally the box is strapped with two bands (made of steel, 16 mm wide) parallel to the broad side edges;

Outside dimensions: 795 x 595 x 500 mm (L x B x H);

Inner Packagings: five 4.0-l-glass bottles (outside diameter: 159 mm; height <incl. closure>: 344 mm; maximum gross mass of one filled inner packaging: 13.25 kg) with plastic screw closure;

Maximum gross mass of the filled and sealed package: 62 kg;

4.3 Design „Box size 3 - 580 x 485 x 485 mm“

Box closure: locating the side lugs and three lid closure lugs into the appropriate slots and bending them back on themselves;

Outside dimensions: 595 x 500 x 500 mm (L x B x H);

Inner Packagings: three 4.0-l-glass bottles (outside diameter: 159 mm; height <incl. closure>: 344 mm; maximum gross mass of one filled inner packaging: 13.25 kg) with plastic screw closure;

Maximum gross mass of the filled and sealed package: 40 kg;

4.4 Design „Box size 4 - 580 x 380 x 485 mm“

Box closure: locating the side lugs and three lid closure lugs into the appropriate slots and bending them back on themselves;

Outside dimensions: 595 x 395 x 500 mm (L x B x H);

Inner Packagings: two 4.0-l-glass bottles (outside diameter: 159 mm; height <incl. closure>: 344 mm; maximum gross mass of one filled inner packaging: 13.25 kg) with plastic screw closure;

Maximum gross mass of the filled and sealed package: 29 kg;

Original filling material: articles or inner packagings of any type for solids or liquids;

For the tests glass bottles as inner packagings filled with water and metal rivets were used.

5 Requirements for the Packaging Designs

The packaging designs must be in conformity with the design types which were tested according to the below-mentioned test report for a design type 4DV („Plywood Boxes“) in accordance with section IV of enclosure A.5 to the European Agreement regarding the Carriage of Dangerous Goods by Road (ADR).

Similar regulations are in force for the transport by train (RID), by ship (IMDG-Code) and by plane (ICAO-Code), whereby the test requirements regarding the packagings for carrying dangerous goods by the various transport operators have been largely harmonised, because of the acceptance of the UN-Recommendations („Orange book“, Recommendations prepared by the United Nations Committee of Experts on the Transport of Dangerous Goods, tenth revised edition, 1997).

Therefore the mentioned test report is an integral part of this licence:

Test Report No.:	Date:	Testing House:
5353/3/00	2000-03-17	Österreichisches Institut für Verpackungswesen

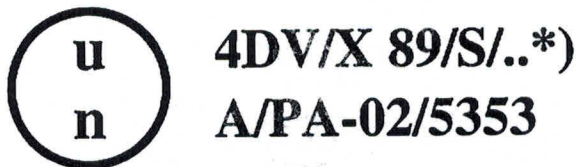
6 Manufacturing of the Packagings

Packagings of these licenced designs may be mass-produced. By printing the UN-Marking on the packagings the manufacturer guarantees that the mass-produced packagings meet all the requirements of the licenced packaging designs and that all conditions and supports listed in this licence are fulfilled.

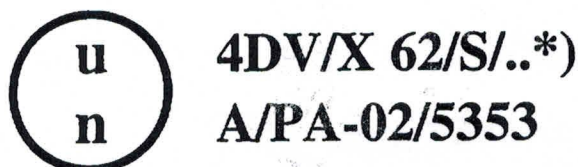
7 Marking

The plywood boxes, when mass-produced in accordance with the tested designs, must be durably and visibly marked as follows:

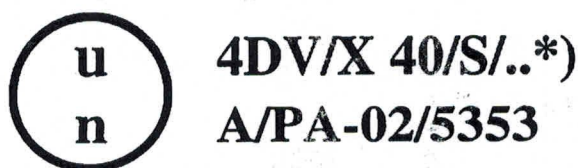
Design „Box size 1 - 980 x 580 x 485 mm“



Design „Box size 2 - 780 x 580 x 485 mm“



Design „Box size 3 - 580 x 485 x 485 mm“



*) the last two digits of the year of production of the plywood boxes

All letters, numerals and symbols shall be at least 12 mm high and the markings or a duplicate thereof shall appear on the top or on a side of the packaging.

Design „Box size 4 - 580 x 380 x 485 mm“



4DV/X 29/S/..*)
A/PA-02/5353

*) the last two digits of the year of production of the plywood boxes

All letters, numerals and symbols shall be at least 6 mm high.

8 Conditions for the Use of the Packagings

8.1 Packagings, mass-produced in accordance with the licenced packaging designs and marked according to point 7 may be used for dangerous goods if such packagings are permitted by the regulations of the various transport operators.

8.2 According to the capability of the packagings, dangerous goods to be transported can be classified in packaging group I, II or III.

8.3 The total gross mass of the inner packagings, inserted in the absorbent material must not exceed:

Design „Box size 1 - 980 x 580 x 485 mm“:	39.75 kg
Design „Box size 2 - 780 x 580 x 485 mm“:	33.13 kg
Design „Box size 3 - 580 x 485 x 485 mm“:	19.88 kg
Design „Box size 4 - 580 x 380 x 485 mm“:	13.25 kg

The gross mass of the packages must not exceed:

Design „Box size 1 - 980 x 580 x 485 mm“:	89 kg
Design „Box size 2 - 780 x 580 x 485 mm“:	62 kg
Design „Box size 3 - 580 x 485 x 485 mm“:	40 kg
Design „Box size 4 - 580 x 380 x 485 mm“:	29 kg

8.4 The thickness of cushioning material between inner packagings and between inner packagings and the outside of the packaging should not be reduced below the corresponding thicknesses in

the originally tested packaging. When either fewer or smaller inner packagings are used (as compared to the inner packagings used in the drop test), sufficient additional cushioning material should be used to take up void spaces.

- 8.5 Inner packagings containing liquids should be completely surrounded with a sufficient quantity of absorbent material to absorb the entire liquid contents of the inner packagings.
- 8.6 In addition to the UN-Marking specified in point 7 the packagings have to bear other prescribed markings, symbols and dangerous goods labels.
- 8.7 Those parts of packagings which are in direct contact with dangerous substances should not be affected by chemical or by other action of those substances. If necessary, they should be provided with a suitable inner coating or treatment. Such parts of packagings should not incorporate constituents liable to react dangerously with the contents so as to form hazardous products, or to weaken them significantly.
- 8.8 The applicant named in point 2 must be able to prove that all conditions concerning the usage of these packagings are well known to everybody who uses/fills these packagings for/with dangerous goods.
- 8.9 Packagings must be manufactured and tested under a quality assurance programme which satisfies the competent authority in order to ensure that each manufactured packaging meets the requirements of section IV of enclosure A.5 to the European Agreement regarding the Carriage of Dangerous Goods by Road (ADR).

9 Others

The packaging designs are in accordance with the test requirements for packagings for the carriage of dangerous goods as stated in the international agreements for traffic by road (ADR), rail (RID), sea (IMDG-Code) and air (IATA-DGR/ICAO-TI). This also covers the test requirements laid down in the Recommendations of the United Nations (UN).

This licence is given but may be revoked at any time.

10 Licence

The packaging designs as prescribed in point 4 are licenced under the condition that the requirements of point 5 - 8 are fulfilled.

ÖSTERREICHISCHES INSTITUT FÜR VERPACKUNGSWESEN



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