

TYPE APPROVAL OF PACKAGING FOR TRANSPORTATION OF DANGEROUS GOODS CERTIFICATE NO.: NETO103B

HOLDER OF CERTIFICATE: Emballator Mellerud Plast AB

MANUFACTURER:

Emballator Mellerud Plast AB, Box 83, SE-464 22 Mellerud, SWEDEN

MARKING ON PACKAGING:

Each packaging intended for use according to the ADR shall bear markings which are durable, legible and placed in a location as to be readily visible. Letters, numerals and symbols shall be at least 6 mm high. The packaging shall also be appropriately marked with the month of the manufacture. The period of use permitted for the carriage of dangerous substances shall be five years from the date of manufacture of the drum, except where a shorter period of use is prescribed because of the nature of the substance to be carried.

(") 1H1/Y1.2/100/YR/N/NET0103B - ID

| (un) | : The United Nations symbol |
|---------------|--|
| 1H1 | : Plastics drums, non-removable head |
| Y1.2 | : Packaging group II and III, and relative density of the substance |
| 100 | : Hydraulic test pressure in kPa |
| YR | : To be replaced with the last two digits of the year of manufacture |
| N | : Norway, the state authorizing the allocation of the mark |
| NET0103B - ID | : Identification of the jerrican followed by "ID" to be replaced by the name or symbol of the manufacturer |
| | |

PRODUCT:

Method of manufacture/ Description Blow moulded bottle/drum performed in HDPE, details in report.



DIMENSIONS:

| Weight of the | Volume, I | H*Ø, mm | Thickness, mm | Neck size, mm | Drawing | |
|---------------|-----------|------------|---------------|---------------|------------|--|
| drum, g | | | | | | |
| 47.4 - 62.5 | 1.0 | 253.6*82.5 | 0.65 | 28 | U0-100-280 | |
| 47.4 - 62.5 | 1.0 | 253.6*82.5 | 0.65 | 32 | U0-100-330 | |
| 49.7 - 57.9 | 1.0 | 253.6*82.5 | 0.65 | 28 | U0-100-280 | |
| 49.7 - 57.9 | 1.0 | 253.6*82.5 | 0.65 | 32 | U0-100-330 | |

MAXIMUM DEGREE OF FILLING IN LITER AT 15 °C, SHALL BE:

| Initial boiling | < 60 | >= 60 < 100 | >= 100 < 200 | >= 200 < 300 | >= 300 |
|-------------------|------|-------------|--------------|--------------|--------|
| point in °C | | | | | |
| Degree of filling | 0.96 | 0.98 | 1.01 | 1.03 | 1.05 |
| in liter | | | | | |

CLOSING MECHANISM:

| Screw cap | Producer | Drawings | Material | Gasket | Torque |
|-----------|----------------|----------|-----------|----------|----------|
| 32 mm | Emballator | 12485 | HDPE | none | 2 - 3 Nm |
| | Växjö Plast AB | | | | |
| 28 mm | Emballator | 12484 | HDPE | none | 2 - 3 Nm |
| | Växjöplast AB | | | | |
| CR 32 mm | Modulpac AB | 8320004 | HDPE/HDPE | Alkozell | 3 Nm |
| CR 32 mm | Emballator | 12524 | HDPE/HDPE | none | 3 Nm |
| | Växjöplast AB | | | | |





LEGISLATION:

The certificate is valid for a maximum of five years, provided no modifications have been made to the packaging design, materials, dimensions, closure system or manner of construction. To ensure validation of the certificate, check the NET website.

NET issues the certification on described product according to delegated authority from Norwegian Directorate for Civil Protection and Emergency Planning (DSB): Legal regulations for Transportation of Dangerous Goods on road and railway - 2023/4375 PRAX.

NET issues the certification on described product according to delegated authority from Norwegian Maritime Directorate (Sjøfartsdirektoratet) - 200705977-4/5367.1.

NET issues the certification on described product according to an agreement between Norwegian Civil Aviation Authority (Luftfartstilsynet) - 01.03.18 - 18/00114-8.

REGULATIONS BASED UPON FOR APPROVAL:

UN Recommendations on the Transport of Dangerous Goods.

ADR, European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID, International Regulations on Transport of Dangerous Goods by Rail.

IMDG, International Maritime Dangerous Goods Code, for sea transport.

ICAO, Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IATA, Dangerous Goods Regulations, for the air transport.

TESTS CARRIED OUT:

Prototype tests performed and approved according to the above regulations:

6.1.5.2.6 Chemical compatibility

- 6.1.5.3 Drop test
- 6.1.5.4 Leakproofness test
- 6.1.5.5 Internal pressure test
- 6.1.5.6 Stacking test

6.1.5.7 Supplementary permeability test

APPROVAL IS VALID FOR:

The packaging is valid for packaging group II and III containing liquid substances covered by the liquids listed in the table below. The liquids marked with letter A - F are referring to standard liquids listed in ADR 6.1.6.1 and verified by chemical compatibility testing, ADR 6.1.5.2.6, to this specific liquid.

The dangerous substances allowed to transport in the packaging after chemical compatibility with these liquids, are listed in the "Assimilation list" table 4.1.1.21.6 in ADR.

The packaging shall always be used according to the requirements of the applicable UN-code and its packaging instructions.

| Content | Max. gross weight, kg | Max. vapour pressure, | Drum |
|---------------------------|-----------------------|-----------------------|---------|
| | | kPa at +50°C | |
| Standard liquid A: Acetic | 1.1 | 114 | 1,2,3,4 |
| Acid | | | |
| Standard liquid B: | 1.0 | 114 | 1,2,3,4 |
| Mixture of hydrocarbons | | | |
| Standard liquid C: Water | 1.2 | 114 | 3,4 |

DOCUMENTS BASED UPON FOR APPROVAL:

| Report id. | Date | Issued by | Scope |
|-------------|----------|-----------|---------------------|
| NET28T0103A | 03.12.18 | NET | Additional test cap |
| | | | 8320004 |
| NET0103B2 | 22.10.15 | NET | Additional test WS |
| NET0103B | 17.03.15 | NET | Type approval |
| NET0103A3 | 03.12.18 | NET | Additional test cap |
| | | | 12485, 12524 |

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Web: www.net17025.com



VALIDITY:

The continued validity of the type approval requires that the holder of the certificate and/ or the manufacturer inform NET certification that has approved its type of packaging of any changes to the characteristics of the type or anything that can influence on the transport safety on the specific design so that it can be verified that the type of packaging continues to comply with packaging tested as base for the original type approval.

The validity of the type approval assume regular verification by means of periodic audits by NET in accordance with NET Doc 2: "Production control agreement". The packaging shall be manufactured, reconditioned and tested under a quality assurance program which satisfies NET Certification, in order to ensure that each packaging meets the requirements in ADR and the guidelines in ISO 16106.

TEST STANDARD:

BREVIK, NORWAY

All tests are performed in accordance with NET accredited test method ATM001. The test method is accredited in accordance with ISO17025 approved by Norsk Akkreditering and based upon ISO16495 and ISO13274.



31.01.2029

Amis Weme-

Mathias Werner Certification Officer

Nordisk Emballasje Testing Certification

Rune Madsen Fink Control Officer

18.01.2024 CERTIFICATE IS VALID UNTIL: