

TYPE APPROVAL OF PACKAGING FOR TRANSPORTATION OF DANGEROUS GOODS CERTIFICATE NO.: NET9509A

HOLDER OF CERTIFICATE:
Norsk Formblåsing AS

MANUFACTURER: Norsk Formblåsing AS, Merdeveien 12 B, 3676 Notodden, Norway

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.

 **1H1W/Y1.6/100/YR/N/NET9509A - REC**

 : The United Nations symbol
1H1W : Plastics drums, non-removable head,
"W" = same type code, different spec than 6.1.4, but equivalent per 6.1.1.2.
Y1.6 : 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
NET9509A - REC : Identification of the drum followed by "REC" = Packagings with recycled plastics (1.2.1)

PRODUCT:

Method of manufacture/ Description

Blow moulded bottle produced from recycled HDPE in accordance with specifications, details provided in the test report.



DIMENSIONS:

Weight of the drum, g	Volume, l	H*Ø, mm	Thickness, mm	Neck size, mm	Drawing
74.3-79.1	1.0	259.6*82.0	0.8	28	1000 ml 10/4-2025

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

Initial boiling point in °C	< 60	>= 60 < 100	>= 100 < 200	>= 200 < 300	>= 300
Degree of filling in liter	0.96	0.98	1.00	1.02	1.04

CLOSING MECHANISM:

Screw cap	Producer	Drawings	Material	Wad	Torque
CR 28 mm	Modulpac AB	8280013	HDPE, details in report	PET/ ALKOzell/ PET	3 Nm


LEGISLATION:

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.

The approval 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. This certificate is liable to withdrawal at any time, to ensure validation check the published version on the Internet (www.net17025.com/Sertifisering/UN_ADR/cid/30758/).

Prior to reuse, UN-approved packaging intended for the transport of dangerous goods shall be inspected to confirm that it remains free from damage, corrosion, and contamination. Compliance with the original ADR type approval, including all applicable prototype test performance criteria, must be maintained. Packaging exhibiting any sign of reduced mechanical integrity shall be subject to reconditioning, repair, or be permanently withdrawn from use. All functional components - including closures, gaskets, and valves - must remain intact and operational to ensure continued conformity.

Packaging that no longer meets these conditions shall not be reused for the transport of dangerous goods in accordance with ADR 4.1.1.9.

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 testing was performed and approved in accordance with the above-mentioned regulations. Approval is conditional upon compliance with NET procedures for the acceptance of recycled plastics in dangerous goods packaging. Accordingly:

The packaging was tested one packaging group level higher than the intended approval level.

The internal pressure test was conducted at 1.5 times the prescribed test pressure.

The raw material manufacturer shall be approved by NET through an audit. If not, the approval may be limited to a single production batch.

The following prototype tests were carried out in accordance with ADR 6.1.5:

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

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. vapour pressure, kPa at +50°C
Standard liquid F: Water	114

DOCUMENTS BASED UPON FOR APPROVAL:

Report id.	Date	Issued by	Scope
NET9509A	24.06.25	NET	Type approval

VALIDITY:

The continued validity of the type approval requires that the holder of the certificate and/or the manufacturer informs NET Certification of any changes to the design, materials, closure system or any other characteristics that may influence transport safety. Such changes must be verified to ensure continued compliance with the original type approval.

The validity of the type approval further requires regular verification through 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 accepted by NET Certification, ensuring compliance with ADR requirements and the guidelines in NS-EN ISO 16106:2020.

In addition, the producer of the recycled plastics material used in the packaging shall be subject to annual audits performed by NET, verifying compliance with ISO 16103:2005 "Packaging - Transport packages for dangerous goods - Recycled plastics material". Approval remains valid only if both the packaging manufacturer and the recycled material producer successfully pass these audits.

TEST STANDARD:

All tests are performed in accordance with NET accredited test method ATM001.

The test method is accredited in accordance with NS-EN ISO/IEC 17025:2017 approved by Norsk Akkreditering and according to NS-EN ISO 16495:2022 and NS-EN ISO 13274:2013.



BREVIK, NORWAY

05.09.2025 CERTIFICATE IS VALID UNTIL:

30.09.2030

A handwritten signature in blue ink, reading 'Mathias Werner'.

Mathias Werner
Certification Officer

A handwritten signature in blue ink, reading 'Rune Madsen Fink'.

Rune Madsen Fink
Control Officer

Nordisk Emballasje Testing Certification

