



**PRODUCT APPROVAL OF PACKAGING
FOR TRANSPORTATION OF DANGEROUS GOODS
CERTIFICATE NO.: NET0359B**

HOLDER OF CERTIFICATE:

Greif Sweden AB

MANUFACTURER: Greif Sweden AB, Box 23, SE-311 23 Falkenberg, Sweden

MARKING ON PACKAGING:  **31HA1/Y/MMY/N/NET0359B - ID/4069/2017**

"MMYY" to be replaced with the month and year (last two digits) of manufacture.

"ID" to be replaced by the name or symbol of the manufacturer.

Each IBC shall also be marked according to 6.5.2.2.1 ADR/RID/IMDG, and each inner receptacle shall be marked according to 6.5.2.2.4 ADR/RID/IMDG.

PRODUCT:

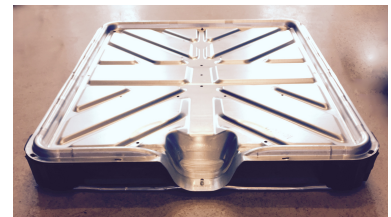
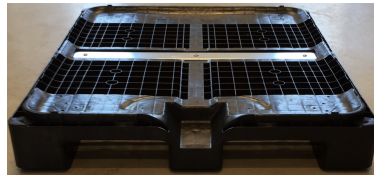
| Packaging code | Description | Material |
|----------------------|--|---|
| 31HA1, Composite IBC | With a rigid plastics inner receptacle and outer casing of steel | Plastic / Steel / Wood, details in report |

CLOSING MECHANISM:

| Closure type | Description | Drawing | Material | Torque |
|----------------------|------------------------------|--------------|--------------------|--------|
| Screw cap #1 | 150 mm, black/natural | 2064co1rev0 | HDPE | 35 Nm |
| Screw cap #2 | 150 mm vented | 2001co0rev3 | HDPE | 35 Nm |
| Screw cap #3 | 150 mm vented | TSF-21000100 | HDPE | 35 Nm |
| Screw cap #4 | 150 mm vented | 2064co0rev2 | HDPE | 35 Nm |
| Screw cap #5 | 220 mm, black/natural | 2000co0rev4 | HDPE | 35 Nm |
| Valve #1 | 2" integrated nut, butterfly | 2017ass0rev5 | HDPE/PP/fibreglass | - |
| Valve #2 | 2" weldable, butterfly | 2019cp1rev0 | HDPE/PP/fibreglass | - |
| Valve #3 | 2" plunger | 2008ass0rev1 | HDPE | - |
| Valve #4 | 3" integrated nut | 2015ass0rev4 | HDPE/PP/fibreglass | - |
| Valve #5, with liner | 2" weldable, Butterfly | 2019ass0rev5 | HDPE | - |
| Valve #6 | 2" integrated nut, ball | 2055ass0rev0 | HDPE/PP/fibreglass | - |

INNER PACKAGING/ACCESSORIES:

| Type | Description | Drawing | Material |
|-----------------------|--|--------------|---------------|
| Inner receptacle Ø150 | Blow moulded | 2003bo0rev11 | HDPE |
| Inner receptacle Ø220 | Blow moulded | 2003bo0rev11 | HDPE |
| Outer casing | Galvanized pipe section. Lattice-type basket screwed onto a pallet | 2014ga0rev2 | Steel |
| Corner protection | Black sheets of plastic | FS-0003 revA | HDPE |
| Wood pallet | Board, plank | IBC Trä pall | Wood |
| Plastic pallet | Blow moulded/Welded | 2066ppj0rev0 | HDPE |
| Hybrid pallet | Standard Nuovo | 2058ass0rev0 | Plastic/Steel |



DIMENSIONS:

| Packaging | Tara weight, kg | Volume, l | Height, mm | Width, mm | Length, mm |
|---------------------|-----------------|-----------|------------|-----------|------------|
| IBC, wood pallet | 58.0 | 1056 | 1170 | 1000 | 1200 |
| IBC, plastic pallet | 54.0 | 1056 | 1170 | 1000 | 1200 |
| IBC, hybrid pallet | 53.9 | 1056 | 1160 | 1000 | 1200 |

APPROVAL:

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 - 06/6950-7/BJRU.

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.

APPROVAL IS VALID FOR:

The packaging shall always be used according to the requirements of the applicable UN-code and its packaging instructions. The 2" weldable butterfly valve (listed as #5) is only approved with a welded aluminum liner between neck and cap. The following test are performed and approved: Bottom lift- , drop-, leakness-, internal pressure-, stacking- and vibration test. Compatibility testing has been carried out according to ADR/RID with the content listed below:

| Content | Max. relative density | Max. vapour pressure, kPa at +50°C | Packaging group |
|------------------|-----------------------|------------------------------------|-----------------|
| Water | 1.9 | 114 | II and III |
| Wetting Solution | 1.6 | 114 | II and III |
| Acetic Acid | 1.6 | 114 | II and III |
| n-Butyl acetate | 1.5 | 114 | II and III |
| White Spirit | 1.5 | 114 | II and III |
| Nitric Acid | 1.5 | 114 | II and III |

DOCUMENTS BASED UPON FOR APPROVAL:

| Report id. | Date | Issued by | Scope |
|-----------------|------------|-----------|-------------------------------------|
| NET0359B2 | 02.05.2016 | NET | Type testing, Ws, Wa, Aa & n-Ba |
| NET0359B | 03.06.2016 | NET | Type Approval, water & Na |
| NET0359A | 03.06.2016 | NET | Type Approval |
| 160058, Rev.0 | 24.06.2016 | TÜV | Vibration testing, plastic pallet |
| Report 100068.3 | 31.03.2010 | TÜV | Vibration testing, wooden pallet |
| Report 100068.4 | 31.03.2010 | TÜV | Vibration testing, hybrid pallet |
| GV/gv/T-15.039 | 23.10.2015 | IBE-BVI | Additional cap, #4 |
| NET03TE32 | 21.03.2017 | NET | Technical evaluation, bubble weight |
| NET03TE33 | 19.05.2017 | NET | Technical evaluation, cap #1 |

PORSGRUNN, NORWAY

22.05.2017 CERTIFICATE IS VALID UNTIL:

31.05.2022



Geir Morten Johansen
Certification Officer



Rune Madsen Fink
Control Officer

Nordisk Emballasje Testing AS Certification