



# PRODUCT APPROVAL OF PACKAGING FOR TRANSPORTATION OF DANGEROUS GOODS CERTIFICATE NO.: NET0393AX

HOLDER OF CERTIFICATE:  
**Greif Sweden AB**

2000 kg max

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

**MARKING ON PACKAGING:**  **31HA1/Y/MMYY/N/NET0393AX - ID/3600/1997**

"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:**

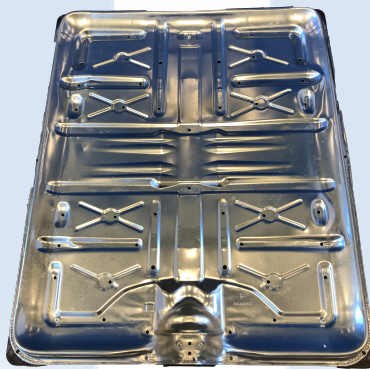
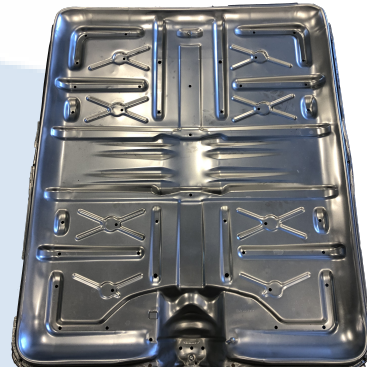
| Packaging code       | Description                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------------------|
| 31HA1, Composite IBC | Rigid plastics inner receptacle; Greif Sweden NET0359 and outer casing of steel and pallet; Schütz BAM 14978 & BAM 14822 |

## **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  |
| Screw cap #6         | 220 mm                       | 2068co1rev0  | HDPE               | 90 Nm  |
| Screw cap #7         | 220 mm, vented               | 2068co0rev0  | HDPE               | 90 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.<br>Lattice-type basket<br>screwed onto a pallet | O-C-14822    | Steel            |
| Corner protection         | Black sheets of plastic                                                  | C-P-14978    | HDPE             |
| Wood pallet, BAM 14978    | Board, plank                                                             | P-W-14978    | Wood             |
| Plastic pallet, BAM 14822 | Blow moulded/Welded                                                      | P-P-14822    | HDPE             |
| Hybrid pallet, BAM 14822  | Galvanized steel sheet                                                   | P-H-14822    | Plastic/Steel    |
| Steel BAM, 14822          | Galvanized steel sheet                                                   | P-S-14822    | Galvanized steel |







### DIMENSIONS:

| Packaging           | Tara weight, kg | Volume, l | Height, mm | Width, mm | Length, mm |
|---------------------|-----------------|-----------|------------|-----------|------------|
| IBC, wood pallet    | 57.5            | 1056      | 1145       | 1000      | 1200       |
| IBC, plastic pallet | 58.0            | 1056      | 1175       | 1000      | 1210       |
| IBC, hybrid pallet  | 52.5            | 1056      | 1155       | 1000      | 1210       |
| IBC, steel pallet   | 55.5            | 1056      | 1160       | 1000      | 1195       |

### APPROVAL:

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 - 06/6950-7/BJRU.

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

### 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                         |
|------------|------------|-----------|-------------------------------|
| NET0393CX  | 04.07.2019 | NET       | Type Approval, cross bottling |
| NET03TE37  | 30.08.2019 | NET       | Technical evaluation          |

## TEST STANDARD:

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.



PORSGRUNN, NORWAY

29.08.2019

CERTIFICATE IS VALID UNTIL:

31.08.2024



Geir Morten Johansen  
Certification Officer



Rune Madsen Fink  
Control Officer

*Nordisk Emballasje Testing AS Certification*