Quality Assurance and Regulatory Affairs
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November 23, 2020

UN/DOT Design Type Certification

Report No:	F-1278-201029	**Test Type:**	New Certification
Test Date:	October 29, 2020	**Expiration Date:**	October 29, 2021
Test Facility:	Greif – Alsip, IL Technical Center 4300 W 10th Street Alsip, IL 60803		

Attached are our laboratory test result sheets of the UN/DOT Performance Test on the fibre drums that were conducted at the above test facility location.

This design is manufactured at the following location(s): Charlotte, Morgan Hill, Naperville, Windsor Locks.

These sample containers, that were made with the proper components, passed the required tests for the following UN Marking(s):

1G/Y70/S 1G/Z70/S

Thank you and best regards.



Phil Zamperin
Director, Quality Assurance and Regulatory Affairs

This test report is the property of Greif. The know-how, methods and techniques disclosed in this report are confidential information which can only be used by those persons with specific written authorization from Greif.

Quality Assurance and Regulatory Affairs
United Nations/IMO/DOT
Performance Test

DESIGN TYPE Details

Report No:	F-1278-201029
Date Tested:	October 29, 2020
Qualification Date:	April 13, 2006
Drum Style:	RT
Drum Type:	Ro-Con Transport Fibre Drum
UN Certified Marking(s):	1G/Y70/S 1G/Z70/S
Diameter:	12.125 inches
Overall Height:	25.5 inches
Tare Weight:	4.04 lbs
Gallon Capacity:	7 - 15.5
Cap Material:	Kraft
Cap Material Weight:	56#
Cap No of Lams:	5 lams
Cap Liner/Barrier:	None
Body/Btm Cap Material:	Kraft
Body/Btm Cap Weight:	56#
Body/Btm Cap No of Lams:	5 lams
Body/Btm Cap Liner / Barrier:	None
Insert Material:	N/A
Insert Material Weight:	N/A
Insert Material No of Lams:	N/A
Insert Liner / Barrier:	N/A
Top Element Min:	.120
Bottom Element Min:	.120
Poly Bag:	None
Bag Application:	N/A

Drum Construction:
Shell/Tube is constructed of convolutely wound kraft or barrier (if applicable) paper using adhesive to bind individual layers. The bottom of the tube is attached to a head and facer by folding the bottom tube end inward and joining between the bottom header and bottom facer. Top shell/chime remains a straight cut that allows for attachment of a slip on All-Fi cover with no locking ring. All Fibre component end is constructed by manufacture of a larger diameter tube, folding the tube end inward and attaching a header and facer, which is bound together with adhesive. Drum shall be sealed with or without tape, according to closing instructions.

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NEW DESIGN TYPE RESULT SHEET

Report No:	F-1278-201029	
Date Tested:	October 29, 2020	
Qualification Date:	April 13, 2006	
Drum Style:	Ro-Con Transport Fibre Drum	
UN Certified Marking(s):	1G/Y70/S	1G/Z70/S
Maximium Capacity:	58.8 Litres	15.5 Gallons
Capacity Range:	26.6 - 58.8 Litres	7 - 15.5 Gallons
Test Mass - Gross:	70.0 KG	154.4 Lbs
Tare:	1.8 KG	4.0 Lbs
Net:	68.2 KG	150.4 Lbs

Static Compression Test (49 CFR 178.606)
Package Preparation: Drums filled to 95% minimum capacity, with material similar in density sufficient to represent the gross mass package weight indicated in the certification, min grain size 125 micrometers
Conditioning: 24 hours at 23°C, ±2°C temperature and 50%, ±2% relative humidity.

Total Mass:	617 KG (8.8 Units x 70.0 KG each)
Duration:	24 Hours
Results:	3 Units Passed

Drop Test (49 CFR 178.603)
Package Preparation: Drums filled to 95% minimum capacity, with material similar in density sufficient to represent the gross mass package weight indicated in the certification, min grain size 125 micrometers
Conditioning: 24 Hours a 23°, +/- 2°C Temperature and 50%, +/- 2% Relative Humidity

Drop Height:	1.2 Metres / 47.2 Inches
Diagonal Top Drop | Closure/ Handle @ Impact Point:	3 Units Passed
Diagonal Btm Drop | On bottom edge:	3 Units Passed

Vibration Test (49 CFR 178.608)
Capable of withstanding, without rupture or leakage, the vibration test procedure In 49 CFR 178.608.

Leakproofness (49 CFR 178.604)
Not Applicable

Hydraulic (Hydrostatic) (49 CFR 178.605)
Not Applicable

TEST RESULTS CERTIFIED BY:
Quality Assurance and Regulatory Affairs

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Phil Zamperin
Director, Quality Assurance and Regulatory Affairs

ALL-FI, ALL-FI TRANSPORT, ALL-FI FLUTED, ROCON, ROCON TRANSPORT
CLOSURE NOTIFICATION
** REQUIRES THREE WRAPS OF TAPE **

Product Type: F25 **Country:** USA

Pursuant to the requirement of the Department of Transportation in CFR 49 Part 178.2(c)(1), this is your notification of the closing method used for the containers sold to you. This method of closure should be used to ensure that your containers have been closed in the same manner as when they were initially tested.

Your product may adversely affect container materials, bung threads, or closing devices. Product compatibility with the container is the shipper's responsibility.

These instructions for closure are based upon the closure methods used to enable these containers to pass the United Nations test requirements as outlined by the UN marking on the package.

The closure recommendations do not take into account any hazards present in your facility, or the handling, filling or shipping of your product.

Any containers used for packaging hazardous materials should be inspected prior to filling and shipment. Containers with obvious damage or deterioration should not be filled or shipped.

To Close:

1. Telescoping cover must fit securely on drum. Cover must be pushed onto drum until the top edge of the drum body touches the inside top of the cover.
2. The cover must be secured to the drum body using adhesive backed tape, Intertape - Model RG3…56, 3-inch wide filament tape or equivalent filament reinforced 72mm (3" nominal) wide natural rubber adhesive tape. The tape must wrap around the drum body three (3) times. There should be approximately 1-1/2" of tape on the cover and 1-1/2" of tape on the body of the drum. Press and rub the tape firmly into place around the entire drum.
3. Drums closed in this manner have met the UN performance test requirements as specified in the container markings.