

Quality Assurance and Regulatory Affairs
366 Greif Parkway
Delaware, Ohio 43015
Phone: 740 657 6565
Fax: 740 657 6978



April 19, 2021

UN/DOT Design Type Certification

Report No:	F-1595-210416	Test Type:	New Certification
Test Date:	April 16, 2021	Expiration Date:	April 16, 2022
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): Naperville.

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

1G/Y60/S 1G/Z60/S

Thank you and best regards.

A handwritten signature in black ink, appearing to read "P. Zamperin", written over a horizontal line.

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-1595-210416
Date Tested: April 16, 2021
Qualification Date: May 3, 2018
Drum Style: RTBag
Drum Type: Ro-Con Transport Fibre Drum w/Bag
UN Certified Marking(s):



1G/Y60/S



1G/Z60/S

Diameter: 12.125 inches
Overall Height: 8.625 inches
Tare Weight: 2.6 lbs
Gallon Capacity: 5 - 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: 2mil Bag
Bag Application: Drop-In



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.

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



NEW DESIGN TYPE RESULT SHEET

Report No:	F-1595-210416	
Date Test:	April 16, 2021	
Qualification Date:	May 3, 2018	
Drum Style:	Ro-Con Transport Fibre Drum w/Bag	
UN Certified Marking(s):	 1G/Y60/S	 1G/Z60/S
Maximum Capacity:	19.0 Litres	5 Gallons
Capacity:	19.0 Litres	5 Gallons
Test Mass - Gross:	60.0 KG	132.3 Lbs
Tare:	1.2 KG	2.6 Lbs
Net:	58.8 KG	129.7 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:	763 KG (12.7 Units x 60.0 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/	3 Units Passed
Handle @ Impact Point:	
Diagonal Btm Drop On bottom	3 Units Passed
edge:	

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:

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Phil Zamperin
Director, Quality Assurance and Regulatory Affairs

ALL-FI, ALL-FI TRANSPORT, ROCON, ROCON TRANSPORT CLOSURE NOTIFICATION
**** REQUIRES 2 MIL OR THICKER POLYETHYLENE BAG AND TWO WRAPS OF TAPE ****

Product Type: F22

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. This drum must be used with a 2 mil or thicker polyethylene bag. Fill product into the bag. Twist neck of bag and fold in half. Tie neck of bag with wire or plastic tie.
2. 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.
3. If drums contain slotted handles on the cap and body, slotted handles are to be offset approximately 90 degrees from one another prior to closure.
4. 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 two (2) 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.
5. Drums closed in this manner have met the UN performance test requirements as specified in the container markings.