

## Testing and Technical Service Office

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April 25, 2018

### UNITED NATIONS/IMO/DOT PERFORMANCE TEST

<b>Report No:</b>	F-2021-XX-042018	<b>Test Type:</b>	Annual Retest
<b>Test Date:</b>	4/20/2018	<b>Plant:</b>	Naperville, IL
<b>Expiration Date:</b>	4/20/2019		

Mr. Mike Mohn,

Attached are our laboratory test result sheets of the UN/DOT Performance Test on the fibre drums that were sent to the Greif - Alsip, IL Technical Center.

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

1G/Y106/S/YR

1G/Z106/S/YR

The tested drums also meet NMFC/UFC standards for a fibre drum up to 225 Lbs. Net Weight Limit and 20 Gallon Capacity.

Thank you and best regards.

JB:ch

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

Jordan Brodsky

Director Product Technical and Regulatory Support

TESTING and TECHNICAL SERVICE OFFICE

UNITED NATION/IMO/DOT

PERFORMANCE TEST



Date Tested: 4/20/2018  
 Report #: F-2021-XX-042018  
 Closure Notification: F12-F

**ORIGINAL DESIGN TYPE RESULT SHEET**

Drum Style: Greif Lok Rim Fibre Drum with Bag UN Code: 1G Packing Group II  
 GBC Code: LR140 200 U7DSKK000 100 2W8W00 / LOK-RIM/BAG Cover: Steel  
 Dimensions: I.D.: 355.6 MM / 14 In. O.H.: 787.4 MM / 31 In.

UN Certified Markings:  1G/Y106/S/YR USA/GBC  1G/Z106/S/YR USA/GBC  USA/GBC

Maximum and Minimum Capacity 37.9 - 75.7 Litres / 10 - 20 Gallons  
 Test Mass - Gross: 106 KG / 233.7 Lbs.  
 Tare: 3.7 KG / 8.2 Lbs.  
 Net: 102.3 KG / 225.5 Lbs.

Package Preparation: Drums filled with sand and sawdust (min grain size 125micrometers) to a minimum of 95%.  
 Conditioning: 24 Hours at 23°C, ±2°C Temperature and 50%, ±2% Relative Humidity.

**Drop Tests (49 CFR 178.603)**

Drop Height: 1.2 Metres / 47.25 Inches  
 Results Diagonal Top Drop: **3 Drums Passed**  
 Results Diagonal Bottom Drop: **3 Drums Passed**

**Vibration Test (49 CFR 178.608)**

Capable of withstanding, without rupture or leakage, the vibration tests procedure in 49 CFR 178.608.

**Leakproofness Test (49 CFR 178.604)**

Air Pressure Applied: \_\_\_\_\_ psi  
 Results after 5 minutes: **Not Applicable**

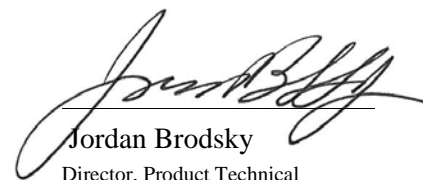
**Hydraulic (Hydrostatic) Test (49 CFR 178.605)**

Internal (Hydraulic) Pressure: \_\_\_\_\_ kPa for a period of \_\_\_\_\_ minutes  
 Results: **Not Applicable**

**Static Compression Test (49 CFR 178.606)**

Total Mass: 678.3 KG ( 6.4 Drums x 106 KG each )  
 Duration: 24 Hours  
 Results: **3 Drums Passed**

**TEST RESULTS CERTIFIED BY: GREIF TESTING and TECHNICAL SERVICES**

  
 Jordan Brodsky  
 Director, Product Technical and Regulatory Support

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.

## GREIF CLOSURE INSTRUCTIONS

Pursuant to the requirements of the Department of Transportation in CFR 49 Part 178.2(c)(1), 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. If there is any question regarding proper closing methods, contact your local Greif salesperson or manufacturing facility. "Effective until further notice".

**To Close:**

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- 1) This drum must be used with a polyethylene bag with a minimum 2 Mil thickness. Fill product into the bag. Twist neck of bag tight and fold in half. Tie the neck of bag with wire or plastic.
  - 2) Place cover on drum.
  - 3) Snap the closing ring over the cover and top lip of the drum. Make sure that the writing on the closing lever is right side up. Also, make sure the bottom edge of the closing ring engages under the top lip of the drum.
  - 4) Pull the locking lever closed. At the same time, tap along the entire outside edge of the closing ring, beginning directly opposite the closing lever, with a mallet until the lever is fully closed against the edge of the ring.
  - 5) Snap the latch into the lever until it locks, then apply a sealing wire or other sealing device through the holes in the latch lever.
  - 6) Drums closed in this manner have met the UN performance test requirements as specified in the container markings.
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REV-KF-05/03/07

**Drum Code:** LR140 200 U7DSKK000 100 2W8W00

**Report #:** F-2021

**Date Tested:** 4/20/2018

**Technician:** JA (Sample drums were closed exactly as described above.)

This UN test certification report form is a sample of the closure notification form. The data on this form reflect the components of the tested sample drums; it details the closing methods followed at the lab.

The closure notification form should be completed using information from the actual customer specification. These values may differ from the sample closing instructions supplied with the UN test certification report.

To obtain this form for your customer service use, contact:

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