## Testing and Technical Service Office

366 Greif Parkway Delaware, Ohio 43015 Phone: 740-657-6565 Fax: 740-657-6978



January 17, 2019

#### UNITED NATIONS/IMO/DOT PERFORMANCE TEST

**Report No:** F-1899-XX-011019 **Test Type:** Annual Retest **Test Date:** 1/10/2019 **Plant:** Englishtown, NJ

**Expiration Date:** 1/10/2020

Mr. Mike Ogilvie,

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/Y120/S/YR 1G/Z120/S/YR

The tested drums also meet NMFC/UFC standards for a fibre drum up to 300 Lbs. Net Weight Limit and 26 Gallon Capacity.

Thank you and best regards.

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Phil Zamperin

Director Product Technical and Regulatory Support

### TESTING and TECHNICAL SERVICE OFFICE

# UNITED NATION/IMO/DOT



Date Tested:	1/10/2019		PERF	ORMANCE TE	ST	A	
Report #: <u>I</u>	F-1899-XX-011019						
Closure Notification: F11-F OR			GINAL DESIGN TYPE RESULT SHEET				
Drum Style: Greif Lok			UN Code:	1G Packi	ng Group	II	
GBC Code: LR158 20	0 2N2N00	/ LOK-RIM		Cover	: Steel		
Dimensions: I	.D.: <u>393.7</u> M	[M / 1:	5.5 In.	O.H.:	838.2 MM /	33	In.
UN Certified Markings	: U 1G/Y120 USA/GB		USA/	120/S/YR GBC	USA/O	GBC	
Maximum and Minimum	n Capacity	37.9 - 98.4	Litres /	10	- 26 Gallons		
Test Mass - Gross:		120	KG /	26	64.6 Lbs.		
Tare:		4.0	KG /		8.8 Lbs.		
Net:		116.0	KG /	25	55.8 Lbs.		
Package Preparation:	Drums filled w of 95%.	ith sand and	sawdust (min	grain size 1251	micrometers) to	a minimum	l 
Conditioning:	24 Hours at 23	°C, ±2°C Te	mperature and	150%, ±2% Re	lative Humidity.		
Drop Tests (49 CFR 1	178.603)						
Drop Height:		1	.2 Metres	s / 47.	25 Inches		
Results Diagonal	Top Drop:	3 Dr	rums Passed				
Results Diagonal	Bottom Drop:	3 D1	rums Passed				
Vibration Test (49 CF	R 178.608)						
	anding, without rupt	ure or leakag	e, the vibration	on tests procedu	are in 49 CFR 17	<sup>7</sup> 8.608.	
Leakproofness Test (4				•			
Air Pressure Appl		psi					
Results after 5 minutes:		Not .	Not Applicable				
			хррпсавіс				
Hydraulic (Hydrostatic	, i	8.005)	In Do for a s	maniad of	minutas		
Internal (Hydraulic) Pressure:		No.4	kPa for a period of minutes				
Results:			Not Applicable				
Static Compression Tes	st (49 CFR 178.600						)
Total Mass:		-	948.0 KG ( 7.9 Drums x 120 KG each )				
Duration:		-	24 Hours				
Results: TEST RESULTS CER	rified RV· — CR	3 Dr REIF	ums Passed		Ku	7:	-
IEST RESULTS CER.			TECHNICA	I SEDVICES	Phil 7am	nerin	_

TESTING and TECHNICAL SERVICES

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 .

Phil Zamperin

Director, Product Technical and Regulatory Support

#### 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".

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- 1) Place cover on drum.
- 2) 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.
- 3) 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.
- 4) Snap the latch into the lever until it locks, then apply a sealing wire or other sealing device through the holes on the latch lever.
- 5) Drums closed in this manner have met the UN performance test requirements as specified in the container markings.

REV-KF-05/03/07

**Drum Code:** LR158 260 U8DSKK000 X00 2N2N00

**Report #:** F-1899

**Date Tested:** 1/10/2019

**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: Greif - Testing and Technical Services

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