



**UNITED NATIONS / DOT
PERFORMANCE CERTIFICATION**

4G DESIGN QUALIFICATION

4 x 1 Gallon Round 150 Gram Plastic Bottle with 38-439 Neck Finish and Two Case Sealing Mechanisms:

- #1) Taped Top and Bottom Flaps**
- #2) Taped Top and Glued Bottom Flaps**

TEST REPORT #: 09-7088(REV 1)



**4G / Y25.8 / S / **
USA / +CC6016**

** Insert year the packaging is manufactured

TESTING PERFORMED FOR:

PUREPAK TECHNOLOGY CORPORATIONS

324 South Braken Lane Suite 3
Chandler, AZ 85224

ATTN: Mike Dodd

TESTING PERFORMED BY:

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Issued Date: May 27, 2009
Revision Date: May 27, 2009



TABLE OF CONTENTS

Section I: CERTIFICATION..... 3

Sections II & V: PACKAGING DESCRIPTION / COMPONENT DRAWINGS 4

Section III: TEST PROCEDURES AND RESULTS 8

DROP TESTS Taped Top and Bottom Flaps 8

DROP TESTS Taped Top and Glued Bottom Flaps 9

STACKING & STACKING STABILITY TESTS Taped Top and Bottom Flaps 10

STACKING TESTS Taped Top and Glued Bottom Flaps 11

PRESSURE DIFFERENTIAL TEST 12

REPETITIVE SHOCK VIBRATION TESTS Taped Top and Bottom Flaps..... 13

REPETITIVE SHOCK VIBRATION TESTS Taped Top and Glued Bottom Flaps..... 14

COBB WATER ABSORPTION TESTS..... 15

REGULATORY AND INDUSTRY STANDARD REFERENCES 16

Section IV: MATHEMATICAL CALCULATIONS..... 17

NOTES AND COMMENTS

Note for Rev 1: Report 09-7088 issued on May 27, 2009 has been updated as of May 27, 2009. Overall height quality control audit information of the bottle on page 6 has been updated per client’s request under this revision

SECTION I: CERTIFICATION

Design Qualification of the PurePak Technology Corporation


4 x 1 Gallon Round 150 Gram Plastic Bottle with 38-439 Neck Finish and Two Case Sealing Mechanisms:

#1) Taped Top and Bottom Flaps

#2) Taped Top and Glued Bottom Flaps

TEN-E PACKAGING SERVICES, INC. certifies that the **PurePak Technology Corporation** packaging referenced above has passed the standards of the DEPARTMENT OF TRANSPORTATION'S TITLE 49 CFR; Performance Oriented Packaging Standards, Section 178. This package is also certified under IMDG, ICAO/IATA Regulations and the UN Recommendations on the Transport of Dangerous Goods. It is the responsibility of the end user to determine authorization for use under these regulations. The use of other packaging methods or components other than those documented in this report may render this certification invalid.

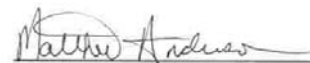
SUMMARY OF PERFORMANCE TESTS

UN /DOT TEST	CFR REFERENCE	TEST LEVEL	TEST CONTENTS	TEST COMPLETED	TEST RESULTS
Drop #1	178.603	1.6m	Methanol /Water	May 1, 2009	PASS
Drop #2	178.603	1.6m	Methanol /Water	May 1, 2009	PASS
Stacking #1	178.606	635.0 Kg – 24 Hrs.	Water	May 1, 2009	PASS
Stacking #2	178.606	249.4 Kg – 24 Hrs.	Water	April 30, 2009	PASS
Pressure	173.27	100kPa – 30 Min.	Water	May 7, 2009	PASS
Vibration #1	178.608	3.6 Hz – 1 Hr.	Water	April 30, 2009	PASS
Vibration #2	178.608	3.6 Hz – 1 Hr.	Water	May 1, 2009	PASS
Cobb	178.516	30 minutes	---	May 1, 2009	PASS
TEST REPORT NUMBERS:			09-7088		
UN MARKING: (CFR 49 - 178.503)			 4G / Y25.8 / S / ** USA / +CC6016		
PACKAGING IDENTIFICATION CODE:			4G - Fiberboard Box (178.516)		
PERFORMANCE STANDARD:			Y (Packaging meets Packing Group II and III tests)		
AUTHORIZED GROSS MASS:			25.8 Kg (56.8 Lbs.)		
"S" DESIGNATION:			Denotes Inner Packagings		
YEAR OF MANUFACTURE:			**Insert year the packaging is manufactured		
STATE AUTHORIZING THE MARK:			USA		
PACKAGING CERTIFICATION AGENCY:			(+CC) TEN-E Packaging Services, Inc. (Ontario, CA)		
THIRD PARTY PACKAGE IDENTIFICATION:			+CC6016		
PERIODIC RETEST DATE:			May 7, 2011		

ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY THAT THE PACKAGING TESTED IS MERCHANTABLE OR FIT FOR A PARTICULAR PURPOSE, ARE DISCLAIMED. In no event shall TEN-E Packaging Services, Inc. liability exceed the total amount paid by **PurePak Technology Corporation** for services rendered. In the event of future changes to the above referenced test standard, it is the responsibility of **PurePak Technology Corporation** to determine whether additional testing or updating of past testing is necessary to verify that the packaging we have tested remains in compliance with those standards.

MANUFACTURER:

PurePak Technology Corporation
324 South Braken Lane Suite 3
Chandler, AZ 85224



Matthew Anderson
 Packaging Engineer
 TEN-E Packaging Services, Inc.
 326 North Corona Avenue
 Ontario, CA 91764

SECTIONS II & V: PACKAGING DESCRIPTION / COMPONENT DRAWINGS

4 x 1 Gallon Round 150 Gram Plastic Bottle with 38-439 Neck Finish and Taped Top and Bottom Flaps

ASSEMBLY DRAWING	TEST LEVELS	
	Certification Type: Design Qualification	
	Packaging Code Designation: 4G	
	Packing Group: II	
	Specific Gravity: 1.6	
	Internal Pressure: 100 kPa	
	TEST SAMPLE PREPARATION (Refer to Section IV)	
	Overall Packaging Tare Weight: 1,558 Grams	
	Inner Packaging Fill Capacity (98% Maximum Capacity):	
	Methanol/Water 3,679 Grams	
	Water 3,793 Grams	
	Package Test Weight:	
	Methanol/Water 16.2 Kg (35.7 Lbs.)	
	Water 16.7 Kg (36.8 Lbs.)	
	Authorized Package Gross Mass: 25.8 Kg (56.8 Lbs.)	
	CLOSING METHODS – INNER PACKAGING	
	Application Torque 45 In-Lbs.	
	Equipment: Kaps All Electronic Torque Tester #701	
	CLOSING METHODS – SHIPPER	
	Top Flaps:	
	Type: 3M #375 Pressure Sensitive Tape	
Width: 48 mm (2")		
Overlap: 2" Minimum		
Tape Pattern: Center Seam		
Inner Flaps: Meet		
Outer Flaps: Meet		
Bottom Flaps:		
Type: 3M #375 Pressure Sensitive Tape		
Width: 48 mm (2")		
Overlap: 2" Minimum		
Tape Pattern: Center Seam		
Inner Flaps: Meet		
Outer Flaps: Meet		

4 x 1 Gallon Round 150 Gram Plastic Bottle with 38-439 Neck Finish and Taped Top and Glued Bottom Flaps		
ASSEMBLY DRAWING	TEST LEVELS	
	Certification Type: Design Qualification	
	Packaging Code Designation: 4G	
	Packing Group: II	
	Specific Gravity: 1.6	
	Internal Pressure: 100 kPa	
	TEST SAMPLE PREPARATION (Refer to Section IV)	
	Overall Packaging Tare Weight: 1,558 Grams	
	Inner Packaging Fill Capacity (98% Maximum Capacity):	
	Methanol/Water 3,679 Grams	
	Water 3,793 Grams	
	Package Test Weight:	
	Methanol/Water 16.2 Kg (35.7 Lbs.)	
	Water 16.7 Kg (36.8 Lbs.)	
	Authorized Package Gross Mass: 25.8 Kg (56.8 Lbs.)	
	CLOSING METHODS – INNER PACKAGING	
Application Torque 45 In-Lbs		
Equipment: Kaps All Electronic Tester #701		
CLOSING METHODS – SHIPPER		
Top Flaps:		
Type: 3M #375 Pressure Sensitive Tape		
Width: 48 mm (2")		
Overlap: 2" Minimum		
Tape Pattern: Center Seam		
Inner Flaps: Meet		
Outer Flaps: Meet		
Bottom Flaps:		
Type: Hot Glued; Customer Provided		
Inner Flaps: Meet		
Outer Flaps: Meet		

CLOSURE			Drawing
Manufacturer: Rexam Plastic Packaging (QIM-317-4937)			
Component Information	Specification Information	Quality Control Audit	
Description:	38-439 Standard Closure		
Material/Pigment:	Polypropylene / White	Polypropylene / White	
Density:		0.904 g/cc	
Tare Weight:	10.3 Grams	10.36 Grams	
Overall Dimensions:			
• Height	1.016" ± 0.015"	1.011"	
• Diameter	1.701" ± 0.015"	1.694"	
Thread:			
• Type			
• Style			
Finish Dimensions:			
• T	1.483" ± 0.007"	1.495"	
• E	1.389" ± 0.007"	1.381"	
• Thread Pitch			
Markings (QC Audit):	134		
LINER/GASKET			
Component Information	Specification Information	Quality Control Audit	
Description:	Polyethylene Foam Liner		
Tare Weight:		0.65 Grams	
Thickness:		0.052"	
Diameter:		1.374"	
PLASTIC BOTTLE			
Manufacturer: Setco: Anaheim, CA (D08-043)			
Component Information	Specification Information	Quality Control Audit	
Description:	1 Gallon Round Plastic Bottle		
Material/Pigment:	High Density Polyethylene / Natural	High Density Polyethylene / Natural	
Method of Mfgr:		Blow Molded	
Density:		0.941 g/cc	
Melt Index (190/21.6):		19.52 g/10 minutes	
Tare Weight:	150 Grams ± 6 Grams	150 Grams	
Capacity:			
• Rated	1 Gallon		
• Overflow	3908 cc ± 44	3,870 Grams (1.022 Gallons)	
Overall Dimensions:			
• Diameter	6.002" ± 0.080"	5.970"	
• Height	12.390" ± 0.090"	12-9/16"	
Finish Dimensions:			
• T	1.460" ± 0.015"	1.473"	
• E	1.367" ± 0.015"	1.378"	
• Thread Pitch		0.1651"	
Wall Thickness:			
• Nominal			
• Minimum		0.016"	
Markings (QC Audit):	80612 Z	SPI "2" HDPE Recycling Symbol	

SHIPPER		
Manufacturer: Sound Packaging: Chandler, AZ		
Component Information	Specification Information	Quality Control Audit
Description:	Regular Slotted Container	
Material/Flute (Inner to Outer):		Double Wall Mottled White Corrugated Fiberboard; B/C-Flute
Basis Weight (Outer to Inner) Lbs./MSF:		42.1/26.2/42.7/25.3/41.9
Combined Wt. of Facings:		126.7
Tare Weight:		825 Grams
Overall Dimensions	Inside	Outside
• Length	12-1/2"	13"
• Width	12-1/2"	12-3/4"
• Height	12-1/2"	13-7/8"
Board Caliper (Nominal):		0.262"
Manufacturer's Joint:		Inside Glued, 1-3/8" Lap
Markings (QC Audit):	12 1/4 x 12 1/4 x 12 1/2 Sound Packaging, LLC	
BOX CERTIFICATE		
Drawing	Component Information	Quality Control Audit
	(A) Corrugated Manufacturer:	Sound Packaging
	(B) Structure:	Double Wall
	(C) Bursting Test	275 Lbs. Per Sq Inch
	(D) Min comb Wt Facings:	110 Lbs. Per M Sq Ft
	(E) Size Limit:	95"
	(F) Gross Wt Lt:	100 Lbs.
	(G) Location:	Chandler, AZ







SECTION III: TEST PROCEDURES AND RESULTS

DROP TESTS

Taped Top and Bottom Flaps







TEST INFORMATION	CRITERIA FOR PASSING THE TEST
<p>TEST CONTENTS: Methanol/Water Solution (0.97 SG)</p> <p>SAMPLE PREPARATION: Refer to Section II</p> <p>CONDITIONING: -18°C (0°F), Chamber #201</p> <p>TEST CONTENTS TEMP.: -18°C (-0.76°F)</p> <p>DROP HEIGHT: 1.6 Meters (63") (Refer to Section IV)</p> <p>TEST EQUIPMENT: L.A.B. Accu Drop 160 #301</p>	<ul style="list-style-type: none"> • For packaging containing liquid, each packaging does not leak. • There can be no damage to the outer packaging likely to adversely affect safety during transport and there is no leakage of the filling substance from the inner packaging. • Any discharge from a closure is slight and ceases immediately after impact with no further leakage. <p>(§178.603)</p>

DROP ORIENTATIONS & TEST RESULTS

Sample #1: Flat on Bottom	Sample #2: Flat on Top	Sample #3: Flat on Long Side
		
<p>PASS: No leakage or damage.</p>	<p>PASS: No leakage. Slight deformation to bottles on impact.</p>	<p>PASS: No leakage or damage.</p>
Sample #4: Flat on Short Side	Sample #5: Bottom Corner	*Sample #1: Top Corner
		
<p>PASS: No leakage or damage.</p>	<p>PASS: No leakage. Slight deformation to shipper on impact.</p>	<p>PASS: No leakage. Slight deformation to shipper on impact.</p>

*Sample used for Flat on Bottom Drop is also used for the Top Corner Drop

DROP TESTS		Taped Top and Glued Bottom Flaps
TEST INFORMATION		CRITERIA FOR PASSING THE TEST
<p>TEST CONTENTS: Methanol/Water Solution (0.97 SG)</p> <p>SAMPLE PREPARATION: Refer to Section II</p> <p>CONDITIONING: -18°C (0°F), Chamber #201</p> <p>TEST CONTENTS TEMP.: -18°C (-0.76°F)</p> <p>DROP HEIGHT: 1.6 Meters (63") (Refer to Section IV)</p> <p>TEST EQUIPMENT: L.A.B. Accu Drop 160 #301</p>	<ul style="list-style-type: none"> For packaging containing liquid, each packaging does not leak. There can be no damage to the outer packaging likely to adversely affect safety during transport and there is no leakage of the filling substance from the inner packaging. Any discharge from a closure is slight and ceases immediately after impact with no further leakage. <p style="text-align: right;">(\$178.603)</p>	


DROP ORIENTATIONS & TEST RESULTS		
Sample #6: Flat on Bottom	Sample #7: Flat on Top	Sample #8: Flat on Long Side
		
PASS: No leakage or damage.	PASS: No leakage. Slight deformation to bottles on impact.	PASS: No leakage or damage.
Sample #9: Flat on Short Side	Sample #10: Bottom Corner	*Sample #6: Top Corner
		
PASS: No leakage or damage.	PASS: No leakage. Slight deformation to shipper on impact..	PASS: No leakage. Slight deformation to shipper on impact.


*Sample used for Flat on Bottom Drop is also used for the Top Corner Drop

STACKING & STACKING STABILITY TESTS **Taped Top and Bottom Flaps**

TEST INFORMATION	CRITERIA FOR PASSING THE TEST
<p>TEST CONTENTS: Water</p> <p>SAMPLE PREPARATION: Refer to Section II</p> <p>CONDITIONING: 73°F / 50% RH, Chamber #202</p> <p>TEST LOAD APPLIED: 635.0 Kg (1,400.0 Lbs.) (Refer to Section IV)</p> <p>TEST DURATION: 24 Hours</p> <p>TEST EQUIPMENT: L.A.B. 5250 Compression System #402</p>	<ul style="list-style-type: none"> • There must be no leakage of the filling substance from the inner receptacle, or inner packaging. • There can be no deterioration that could adversely affect transport safety or any distortion liable to reduce the package's strength, cause instability in stacks of packages, or cause damage to inner packagings that is likely to reduce safety in transport. <p style="text-align: right;">(\$178.606)</p>

STACKING TEST SET UP AND RESULTS

	Sample #	Maximum Deflection After 24 Hours	Results
	11	1/16"	PASS
	12	1/16"	PASS
	13	1/16"	PASS

STACKING STABILITY TEST SET-UP	CRITERIA FOR PASSING THE TEST
 <p style="text-align: center; font-weight: bold; margin-top: 10px;">PASS</p>	<p>In guided load tests, stacking stability must be assessed after test completion.</p> <ul style="list-style-type: none"> • Two filled packagings of the same type must be placed on the test sample. • The stacked packages must maintain their position for one hour. <p style="text-align: right;">(\$178.606)</p>

STACKING TESTS Taped Top and Glued Bottom Flaps

TEST INFORMATION	CRITERIA FOR PASSING THE TEST
<p>TEST CONTENTS: Water</p> <p>SAMPLE PREPARATION: Refer to Section II</p> <p>CONDITIONING: 73°F / 50% RH, Chamber #202</p> <p>TEST LOAD APPLIED: 249.4 Kg (550 Lbs.) (Refer to Section IV)</p> <p>TEST DURATION: 24 Hours</p> <p>TEST EQUIPMENT: Dead Load Weights</p>	<ul style="list-style-type: none"> • There must be no leakage of the filling substance from the inner receptacle, or inner packaging. • There can be no deterioration that could adversely affect transport safety or any distortion liable to reduce the package's strength, cause instability in stacks of packages, or cause damage to inner packagings that is likely to reduce safety in transport. (§178.606)

STACKING TEST SET-UP AND RESULTS

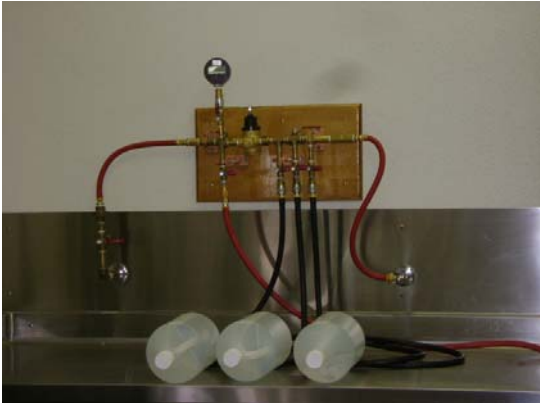


Sample #	Maximum Deflection After 24 Hours	Results
14	0"	PASS
15	0"	PASS
16	0"	PASS
<p>Stacking Stability: Not conducted; required only for guided load tests.</p>		

PRESSURE DIFFERENTIAL TEST

TEST INFORMATION		CRITERIA FOR PASSING THE TEST
TEST CONTENTS:	Water	<ul style="list-style-type: none"> Packaging for which retention of liquid is a basic function must be capable of withstanding the pressure requirements without leakage. (§173.27)
FILL CAPACITY:	Maximum Capacity	
CLOSURE APPLICATION:	Refer to Section II	
CONDITIONING:	Ambient	
TEST PRESSURE:	100kPa	
TEST DURATION:	30 Minutes	
AREA OF PRESSURIZATION:	Through the Bottom	
TEST EQUIPMENT:	Regulated Water Source Gauge #602	


HYDROSTATIC PRESSURE TEST SET-UP & RESULTS

	Sample #	Results	Comments / Observations
	1	PASS	All three samples maintained the 100kPa test pressure for 30 minutes without leakage.
	2	PASS	
	3	PASS	

REPETITIVE SHOCK VIBRATION TESTS **Taped Top and Bottom Flaps**

TEST INFORMATION	CRITERIA FOR PASSING THE TEST
<p>TEST CONTENTS: Water</p> <p>SAMPLE PREPARATION: Refer to Section II</p> <p>CONDITIONING: 73°F / 50% RH, Chamber #202</p> <p>TABLE DISPLACEMENT: 1"</p> <p>TEST FREQUENCY: 3.6 Hz</p> <p>TEST DURATION: 1 Hour</p> <p>TEST EQUIPMENT: Vertical motion using L.A.B. Palletizer Transportation Simulator #501</p>	<p>Immediately following the period of vibration, each package must be removed from the platform, turned on its side and observed for any evidence of leakage.</p> <ul style="list-style-type: none"> • A packaging passes the vibration test if there is no rupture or leakage from any of the packages. • No test sample should show any deterioration which could adversely affect transportation safety or any distortion liable to reduce packaging strength. (\$178.608)


VIBRATION TEST SET-UP & RESULTS

	Sample #	Results	Comments / Observations
	11	PASS	No leakage or damage.
	12	PASS	
	13	PASS	

REPETITIVE SHOCK VIBRATION TESTS Taped Top and Glued Bottom Flaps

TEST INFORMATION	CRITERIA FOR PASSING THE TEST
<p>TEST CONTENTS: Water</p> <p>SAMPLE PREPARATION: Refer to Section II</p> <p>CONDITIONING: 73°F / 50% RH, Chamber #202</p> <p>TABLE DISPLACEMENT: 1"</p> <p>TEST FREQUENCY: 3.6 Hz</p> <p>TEST DURATION: 1 Hour</p> <p>TEST EQUIPMENT: Vertical motion using L.A.B. Palletizer Transportation Simulator #501</p>	<p>Immediately following the period of vibration, each package must be removed from the platform, turned on its side and observed for any evidence of leakage.</p> <ul style="list-style-type: none"> • A packaging passes the vibration test if there is no rupture or leakage from any of the packages. • No test sample should show any deterioration which could adversely affect transportation safety or any distortion liable to reduce packaging strength. (\$178.608)

VIBRATION TEST SET-UP & RESULTS

	Sample #	Results	Comments / Observations
	14	PASS	No leakage or damage.
	15	PASS	
	16	PASS	

COBB WATER ABSORPTION TESTS

TEST INFORMATION		CRITERIA FOR PASSING THE TEST
SAMPLE SIZE:	(5) 5" x 5" Squares	<ul style="list-style-type: none"> An increase in mass greater than 155 g/m² over the 30 minute duration represents an unacceptable level of water resistance. (§178.516)
CONDITIONING:	73°F / 50% RH, Chamber #202	
WATER APPLIED:	100mL / Sample	
TEST DURATION:	30 Minutes / Sample	
TEST EQUIPMENT:	UWE Analytical Balance #102 Gurley Cobb Water Absorption Apparatus	

COBB WATER ABSORPTION TEST RESULTS	
Sample #	Water Absorbed (g/m ²)
1	103 g/m ²
2	94 g/m ²
3	99 g/m ²
4	119 g/m ²
5	110 g/m ²
AVERAGE:	105.0 g/m²
RESULT	PASS

REGULATORY AND INDUSTRY STANDARD REFERENCES

REGULATORY REFERENCES

TEST	49 CFR ^① 2008 Edition	UN ^② 15th Edition	IMDG ^③ 2008 Edition	ICAO ^④ 09-10 Edition	IATA ^⑤ 50th Edition
Drop:	178.603	6.1.5.3	6.1.5.3	6; 4.3	6.3.3
Stacking:	178.606	6.1.5.6	6.1.5.6	6; 4.6	6.3.6
Pressure:	173.27(c)	4.1.1.4.1	---	4; 1.1.6	5.0.2.9
Vibration:	178.608	---	---	4; 1.1.1	5.0.2.7
Cobb:	178.516	6.1.4.12.1	6.1.4.12.1	6; 3.1.11.1	6.2.12.2

- ① United States Department of Transportation Code of Federal Regulations (CFR) Title 49, Transportation, Parts 100-199
- ② The United Nations Recommendations on the Transport of Dangerous Goods — Model Regulations. (UN – Orange Book)
- ③ International Maritime Dangerous Goods Code (IMDG)
- ④ Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO)
- ⑤ International Air Transport Association (IATA) Dangerous Goods Regulations

INDUSTRY STANDARD REFERENCES

Drop:	ASTM ^⑥ D5276:	Standard Test Method for Drop Test of Loaded Containers by Free Fall
	ISO ^⑦ 2248:	Packaging – Complete, Filled Transport Packages – Vertical Impact Test By Dropping
Stacking:	ASTM ^⑥ D4577:	Standard Test Method for Compression Resistance of a Container Under Constant Load
	ISO ^⑦ 2234:	Packaging – Complete, Filled Transport Packages – Stacking Tests using Static Load
Vibration:	ASTM ^⑥ D999:	Standard Test Method for Vibration Testing of Shipping Containers
	ISO ^⑦ 2247:	Packaging – Complete, Filled transport Packages – Vibration Test at Fixed Low Frequency
Cobb:	ISO ^⑦ 535:	Paper and Board - Determination of Water Absorption - Cobb Method

⑥ American Society for Testing and Materials (ASTM)

⑦ International Organization for Standardization (ISO)

EQUIPMENT

All inspection, measuring and test equipment that can affect product quality is calibrated and adjusted at prescribed intervals, or prior to use, and is traceable to NIST, using ANSI Z540 as an overall guide for calibration certification.

SECTION IV: MATHEMATICAL CALCULATIONS

INFORMATION USED FOR CALCULATIONS

Overall Package Tare Weight (PTW):	1,558 Grams	
Overflow Capacity (OFC):		Methanol/Water SG
Methanol/Water	3,754 Grams	SG: 0.970
Water	3,870 Grams	
Number of Inner Packagings (# IP):	4	
Packing Group	II	
Product Specific Gravity (PSG):	1.6	
Packing Group Multiplication Factor (MF):	1.00	
Overall Height of one Package (OH):	13.88 Inches	
Stack Test-# of Samples Tested Simultaneously:	3	

98% OF OVERFLOW

Overflow Capacity (OFC) x 98%

<u>OFC</u>	x	<u>98%</u>		
3,754	x	98% =	3,679 Grams	Methanol/Water
3,870	x	98% =	3,793 Grams	Water

PACKAGE TEST WEIGHTS

Overall Pkg Tare Weight (PTW) + (98% Overflow Capacity (OFC) x # of Inner Pkg (# IP))

<u>PTW</u>	+	<u>(98% OFC)</u>	x	<u># IP</u>	
1,558	+	3,679	x	4	Methanol/Water
1,558	+	3,793	x	4	Water
Methanol/Water:		16.2	Kg	35.7	Lbs.
Water:		16.7	Kg	36.8	Lbs.

AUTHORIZED PACKAGE GROSS MASS CALCULATION (APGM)

Overall Pkg Tare Weight (PTW) + (Product SG (PSG) x 98% Overflow (OFC) x # of Inner Pkg (# IP))

<u>PTW</u>	+	<u>(PSG)</u>	x	<u>98% OFC</u>	x	<u># IP</u>
1,558	+	1.6	x	3,793	x	4
		25.8	Kg	56.8	Lbs.	

DROP HEIGHT				
Calculation For Product Specific Gravities Exceeding 1.2				
Product Specific Gravity (PSG) x Packing Group Multiplication Factor (MF)				
<u>PSG</u>	x	<u>MF</u>	Packing Group: <u>II</u>	
1.6	x	1.00	<u>Required Drop Height</u>	<u>Actual Drop Height</u>
		1.60	63.0 Inches	63 Inches
		Meter		

STACKING TEST MINIMUM LOAD CALCULATIONS				
Number of Packages in a 3m High Stack (118 / Overall Pkg Height (OH) -1)				
118 / Overall Height of one Pkg (OH) - 1				
<u>(118</u>	/	<u>OH)</u>	-1	=
118	/	13.88	-1	=
				<u># 3m HS</u>
				7.5
Stacking Test Load Calculation (Individual Package)				
Authorized Pkg Gross Mass (APGM) x # of Pkg in a 3m High Stack (# 3m HS)				
<u>APGM</u>	x	<u># 3m HS</u>		
25.8	x	7.5		
		193.5 Kg	426.6 Lbs.	

Stacking Test Load Calculation				
Samples x Authorized Pkg Gross Mass (APGM) x # of Pkg in a 3m High Stack (# 3m HS)				
<u>Samples</u>	x	<u>(APGM</u>	x	<u># 3m HS)</u>
3	x	25.8	x	7.5
		580.5 Kg	1,279.8 Lbs.	