

UNITED NATIONS / DOT PERFORMANCE CERTIFICATION



4G DESIGN QUALIFICATION

HMS-63243: 1 x 20 Liter Cubitainer Packaging with and without Hand Holes

TEST REPORT #: 20-MN20246

u 4G/Y32.6/S/** USA/+AA9711

**Insert the year packaging is manufactured

TESTING PERFORMED FOR:

BERLIN PACKAGING

2300 Sweeney Drive Clinton, PA 15026

ATTN: Byran Delvalle

TESTING PERFORMED BY:

TEN-E PACKAGING SERVICES, INC.

1666 County Road 74 Newport, MN 55055 Phone: 651-459-0671

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July 10, 2020



TABLE OF CONTENTS

| SECTION I: CERTIFICATION | 3 |
|--|----|
| SECTIONS II & V: PACKAGING DESCRIPTIONS / COMPONENT DRAWINGS | |
| COMPONENT INFORMATION | |
| SECTION III: TEST PROCEDURES AND RESULTS | |
| DROP TESTS NK Shipper (Variable #1) | 10 |
| DROP TESTS MW Shipper (Variable #2) | 11 |
| STACKING TEST NK Shipper (Variable #1) | 12 |
| STACKING TEST MW Shipper (Variable #2) | 13 |
| VIBRATION TEST NK Shipper (Variable #1) | 14 |
| VIBRATION TEST MW Shipper (Variable #2) | 15 |
| COBB WATER ABSORPTION TEST | |
| REGULATORY AND INDUSTRY STANDARD REFERENCES | 17 |
| SECTION IV: MATHEMATICAL CALCULATIONS | |
| APPENDIX A: MANUEACTURER'S CLOSURE INSTRUCTIONS | 22 |

NOTES AND COMMENTS

Testing of this design covers the following Berlin Packaging kits:

1. COR-H821963253 2. COR-H821963254 3. COR-H81963243

4. COR-H81963255 5. COR-H821963252 (10 L) 6. COR-H81963242 (10 L)

7. HMS-63253 8. HMS-63253D 9. HMS-63254 10. HMS-63243 11. HMS-63255 12. HMS-63252A 13. HMS-63252 14. HMS-63252D 15. HMS-63242

Below is the UN certification mark and gross mass limitation for HMS-63242 (1 x 10 liter cubitainer packaging) that can be used under this report (20-MN20246) provided that the provisions found in Section 178.601 (g) - Selective Testing Variations 1 & 4 have been met.



The end user is responsible for confirming with Berlin Packaging or may elect to conduct their own pressure test to document the inner packagings they are using are capable of meeting the applicable regulatory requirements.

This report is being issued as a design qualification due to testing shippers with and without hand holes per the request of Berlin Packaging from the most recent design qualification report (18-MN20275). This design will retain the +AA9711 certification.



SECTION I: CERTIFICATION

Design Qualification of the Berlin Packaging HMS-63243: 1 x 20 Liter Cubitainer Packaging with and without Hand Holes

TEN-E Packaging Services, Inc. is a current DOT UN Third-Party Certification Agency under §107.403 and certifies that the **Berlin Packaging** design 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 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 | CFR | TEST | TEST | TEST | TEST | |
| TEST | REFERENCE | LEVEL | CONTENTS | COMPLETED | RESULTS | |
| Drop (NK) | 178.603 | 1.5 m | Methanol/Water Solution | July 1, 2020 | PASS | |
| Drop (MW) | 178.603 | 1.5 m | Methanol/Water Solution | July 1, 2020 | PASS | |
| Stacking (NK) | 178.606 | 317.5 Kg - 24 Hours | Water | July 9, 2020 | PASS | |
| Stacking (MW) | 178.606 | 317.5 Kg - 24 Hours | Water | July 10, 2020 | PASS | |
| Pressure | 173.27 | 925,920 | Refer to note on page 2 | | E12522 | |
| Vibration | 178.608 | 4.0 Hz – 1 Hour | Water | July 7, 2020 | PASS | |
| Cobb (NK) | 178.516 | 30 Minutes | | July 8, 2020 | PASS | |
| Cobb (MW) | 178.516 | 30 Minutes | | May 19, 2020 | PASS | |
| TEST REPORT NUMBER: 20-MN20246 | | | | | | |
| UN MARKING: | | | u 4G/Y32.6/S/** | | | |
| (CFR 49 – 178.503) | | | n USA / +AA9711 | | | |
| PACKAGING IDENTIFICATION CODE: | | | 4G - Fiberboard Box (178.516) | | | |
| PERFORMANCE STANDARD: | | | Y (Packaging meets Packing Group II and III tests) | | | |
| AUTHORIZED GROSS MASS: | | | 32.6 Kg (71.8 Lbs.) | | | |
| "S" DESIGNATION: | | | Denotes Inner Packagings | | | |
| YEAR OF MANUFACTURE: | | | ** Insert year the packaging is manufactured | | | |
| STATE AUTHORIZING THE MARK: | | | USA | | | |
| PACKAGING CERTIFICATION AGENCY: | | (+AA) TEN-E Packaging Services, Inc. | | | | |
| PACKAGING CERTIFICATION AGENCT. | | | (Newport, MN CAA #2006030022) | | | |
| THIRD PARTY PACKAGING IDENTIFICATION: | | | +AA9711 | | | |
| PERIODIC RETEST DATE: | | | July 10, 2022 | | | |

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 **Berlin Packaging** for services rendered. In the event of future changes to the above referenced test standards, it is the responsibility of **Berlin Packaging** 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:

Berlin Packaging 2300 Sweeney Drive Clinton, PA 15026 Brad Voeller
Packaging Engineer
TEN-E Packaging Services, Inc.
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Newport MN 55055



APPENDIX A: MANUFACTURER'S CLOSURE INSTRUCTIONS



Catalog #

HMS-63243

1 x 20 Liter Cubitainer Packaging

Closing Instructions

- Construct carton and seal bottom flaps with TECHNOMELT 8990 Hot Melt Adhesive. Outer flaps should meet in the center
- 2. Place die-cut corrugated perimeter liner into carton
- 3. Place cubitainer into carton
- 4. Close cubitainer tightly using 25 in-lb. application torque.
- 5. Seal top flaps with TECHNOMELT 8990 Hot Melt Adhesive. Outer flaps should meet in the center
- 6. Place friction fit dust closure over cap (snaps into die cut opening into carton)
- 7. Insert plastic handle into top of shipper cut outs

Disclaimer:

These closing instructions are provided per 49 CFR 178.2(c). They may only be used for this packaging, manufactured by Dangerous Goods, a Division of Berlin Packaging. Other manufacturers' closing instructions do not apply to this package.

PA Warehouse: 2300 Sweeney Drive, Clinton, PA 15026

800.413.8867

BerlinDangerousGoods.com

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