U.N. NOTIFICATION MANUAL

UN PACKAGING NOTIFICATION AND ACKNOWLEDGEMENT

API KIRK CONTAINERS

2131 S. Garfield Avenue, Commerce, CA 90040-1805 Tel. (323) 888-1077 Fax. (323) 888-6187

This UN Packaging Notification Manual is provided to our customers and distributors in order to meet the Code of Federal Regulations (CFR) hazardous material packaging notification requirements. Packaging manufacturers are required by the CFR Title 49-TRANSPORTATION, Parts 100 to 177 and 178 to 199, to notify their customers and distributors in writing of any requirement not met at the time of transfer, or steps that the user must take (such as the procedure for closing a packaging after filling) and the type and dimensions of any closure, including gaskets, needed to satisfy performance test requirements.

Title 49 CFR Section 178.2:

- (c) Notification ... the manufacturer or other person certifying compliance with the requirements of this part, and each subsequent distributor of that packaging shall -
 - (1) Notify in writing each person to whom that packaging is transferred -
 - (I) Of all requirements in this part not met at the time of transfer, and
 - (ii) Of the type and dimensions of any closure, including gaskets, needed to satisfy performance test requirements.
 - (2) Retain copies of each written notification for at least one year from the date of issuance; and
 - (3) Make copies of all written notifications available for inspection by a representative of the Department.

| Customer / Distributor Acknowledgement: | | | | | |
|---|--|-------|--|------------|----------|
| Company | | | | | |
| | | | | • | |
| Mailing Address | | City | | State | Zip Code |
| Printed Name | | Title | | Department | |
| | | | | | |
| Signature | | | | Date | |
| | | | | | |

By signing and dating this document, I:

- (1) Acknowledge receipt of the API Kirk Containers UN Notification Manual,
- (2) Understand that this manual has been provided for informational purposes only and that the appropriate parts under CFR Title 49-Transportation, must be followed for hazardous material packaging compliance, and
- (3) Understand that copies of this written notification must be retained for at least one year from the date of issue.

Please return a copy of this acknowledgement page to API Kirk Containers.

API Kirk Containers will retain a copy of this notification for at least 1 year after issuance.

| API Issue Date | Issued By: | |
|----------------|------------|--|
| | | |
| | | |

| TIFICAT | ION: CFR TITLE 49 PART 178.2 (c) |
|-----------|---|
| UN Notifi | cation Manual - Table of Contents |
| Page(s) | Description |
| 1 | Acknowledgement Page |
| 2 | Table of Contents, Packaging Identification Code Explanations |
| 3 - 4 | 4G 1 GAL D-Style Quad Pack in Fiberboard Carton Mold 125 |
| | 4G 2.5 Gallon Twin Pack in Fiberboard Carton Mold 220 |
| 7 - 8 | 4G 2.5 Gallon Twin Pack in Fiberboard Carton Mold 250 |
| 9-10 | 3H1 2.5 Gallon Jerrican, 63mm Primary Closure Mold 151 |
| 11 - 12 | 3H1 5 Gallon Jerrican, 70mm Primary Closure and 18mm Secondary Vent Closure Mold 15 |
| 13 - 14 | 4G 1X5 Gallon Square Samson Pak Mold 158 |
| 15 - 16 | 3H1 5 or 6 Gallon Jerrican, 70mm Primary Closure and 18mm Secondary Vent Closure Mold 176 |
| 17 - 18 | 3H1 5 or 6 Gallon Jerrican with Internal 2" Buttress Opening Mold 176 |
| 19 - 20 | 3H1 5 Gallon Jerrican, 70mm Primary Closure and 18mm Secondary Vent Closure Mold 17 |
| 21 - 23 | Series 500-1H2 20 Liter UN Pail with Plain Cover (26/60) |
| | Series 500-1H2 20 Liter UN Pail with Rieke Self Venting Flex spout (26/60) |
| | Series 500-1H2 20 Liter UN Pail with Threaded 70mm Closure (26/60) |
| 30 - 32 | Series 500-1H2 20 Liter UN Pail with Rieke All-Plastic Self Venting Flex Spout (26/60) |
| 33 | Abridgment |

| Type/Material/Category Explanation for API Packaging | | | | | |
|--|-----------|---|------------|-----|-------------------------|
| Type Material Category | | | tegory | | |
| 1 | Drums | G | Fiberboard | Pla | astic Drums & Jerricans |
| 3 | Jerricans | Н | Plastic | 1 | Closed Head |
| 4 | Boxes | | | 2 | Open Head |

| Performance Standard Designations | | | |
|---|--------------------------------------|------------------------------|--|
| Packaging Group | | Degree of Danger | |
| I | | Great (High Hazard Level) | |
| II | | Medium (Medium Hazard Level) | |
| III | | Minor (Low Hazard Level) | |
| Packaging Group for which successfully tested | | | |
| Letter | Testing Groups | | |
| Χ | Meets Packaging Groups I, II and III | | |
| Υ | Meets Packaging Groups II and III | | |
| Z | Meets Packaging Group III Only | | |

Note:

- 4G (4 x 5 Liter Quad Packs) are NOT certified for air shipment.
- 4G (2 x 2.5 Duo Packs) are NOT certified for air shipment.
 4G (1 x 5 Gallon Samson Packs) are NOT certified for air shipment.
 - It is the responsibility of the person offering a hazardous material for transportation to ensure that such packaging is compatible with its lading and complies with test requirements under CFR Title 49-Transportation.

11/21/2023

4G Quad Pack in Fiberboard Box

PRE-CERTIFIED UN 4G PACKAGING

COMPONENT CHECK LIST:

Quantity Description

(4) Closure: 63-S01 63mm Threaded Closure.

Liner: Option (1): 6328003 PE Foam Liner.

Option (2): 632D12K Foil Induction Sealed Liner.

(4) Bottle: 1 Gallon #125 D-Style High Density Polyethylene

Finish: 63mm Neck

(1) Outer Shipper:

48 ECT Double-Wall Mottled White Corrugated Fiberboard, B/C Flute

Manufacture's Joint: Inside Glued, 1 - 1/4" Lap

Shipper O.D. Dimensions: 15-1/2" L x 10-1/2" W x 12-1/2" D

(1) Interior Components: 44 ECT Single Wall Natural Kraft Corrugated Fiberboard, C-flute

Case Sealing:

(1) Top: Strip of 3M # 375 Pressure Sensitive Tape, 2" Minimum Overlap

(2) Bottom: Strip of 3M # 375 Pressure Sensitive Tape, 2" Minimum Overlap

Note: Substitution of any of the components listed above

may render the UN certification invalid

Packaging Suitability

1. Packaging has been certified for Packaging Group II and Group III with specific gravities not exceeding 1.9

With Authorized Gross Mass 34 kg (74.9 lbs).

2. This Package is not Certified for Air Shipment

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

4G Quad Pack in Fiberboard Box

PRE-CERTIFIED UN 4G PACKAGING

Packaging Assembly:

- 1. Once filled, the Inner Packaging closure must be applied to the bottle using an application torque of 100 in-lbs (8.3 ft-lbs) using a torque wrench with a force indicator.
- 2. The bottom of the reshipper is sealed with a strip of 3M # 375 Pressure Sensitive Tape with a 2" minimum overlap.
- 3. Bottles should be seated, so the necks are in the middle of the RSC facing each other.
- 4. Fold the arms of the Z-Divider along Scores and insert into RSC with Arms adjacent and parallel to the side walls of RSC Opposite of inside glue strip.
- 5. The top flaps of the reshipper are folded down and sealed with a strip of 3M # 375 Pressure Sensitive Tape with a 2" minimum overlap.

Note: • Package not intended for reuse.

 Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



4G / Y34.0 / S / ** USA / +AA4458

| <u>Marking</u> | <u>Explanation</u> |
|----------------|--|
| 4G | Packaging Identification Code 4G Box, Fiberboard |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 34.0 | Authorized package gross mass in Kg |
| S | Denotes Inner packaging |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +AA4458 | Packaging tested and certified by a DOT Third Party Certification Agency |
| | |

4G Twin Pack in Fiberboard Box

PRE-CERTIFIED UN 4G PACKAGING

COMPONENT CHECK LIST:

Quantity Description

(2) Closure: 63-S001 63mm Threaded Closure.

Liner: Option (1): 6328003 PE Foam Liner.

Option (2): 632D12K Foil Induction Sealed Liner.

(2) Bottle: 2.5 Gallon F-Style High Density Polyethylene, MOLD 220.

Finish: 63mm Neck

(1) Outer Shipper:

51 ECT Double-Wall Mottled White Corrugated Fiberboard,

B/C-Flute

Manufacture's Joint: Inside Glued 1-5/8" lap.

Outside Dimensions:

14-1/8" L x 9-5/8" W x 15-3/4" H

Case Sealing:

(1) Top: Strip of 3M # 375 Pressure Sensitive Tape, 2" Minimum Overlap

(2) Bottom: Strip of 3M # 375 Pressure Sensitive Tape, 2" Minimum Overlap

Note: Substitution of any of the components listed above

may render the UN certification invalid

Packaging Suitability

- Packaging has been certified for Packaging Group II and III liquids with specific Gravity not exceeding 1.6 with Authorized Gross Mass 35.5 kg (78.2 lbs).
- 2. This Package is not Certified for Air Shipment

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

4G Twin Pack in Fiberboard Box

PRE-CERTIFIED UN 4G PACKAGING

Packaging Assembly:

- 1. Once filled, the closure must be applied to the bottle using an application torque of 100 in-lbs (8.3 ft-lbs) using a torque wrench with a force indicator.
- 2. The bottom of the reshipper is sealed with a strip of 3M # 375 Pressure Sensitive Tape with a 2" minimum overlap.
- 3. The Inner Packages (bottles) are then seated side-by-side into the taped bottom reshipper.
- 4. The top flaps of the reshipper are folded down and sealed with a strip of 3M # 375 Pressure Sensitive Tape with a 2" minimum overlap.

Note: • Package not intended for reuse.

 Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



Maulelma

4G / Y34.0 / S / ** USA / +AA4377

Cumlanation

| <u>Marking</u> | <u>Explanation</u> |
|----------------|--|
| 4G | Packaging Identification Code 4G Box, Fiberboard |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) which covers Packing Group II & III liquid hazardous materials |
| 34 | Authorized package gross mass in Kg |
| S | Denotes Inner packaging |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +AA4377 | Packaging tested and certified by a DOT Third Party Certification Agency |
| | |

4G Twin Pack in Fiberboard Box

PRE-CERTIFIED UN 4G PACKAGING

COMPONENT CHECK LIST:

Quantity Description

(2) Closure: 63-S001 63mm Threaded Closure.

Liner: Option (1): 6328003 PE Foam Liner.

Option (2): 632D12K Foil Induction Sealed Liner.

(2) Bottle: 2.5 Gallon F-Style High Density Polyethylene, MOLD 250.

Finish: 63mm Neck

(1) Outer Shipper:

51 ECT Double-Wall Mottled White Corrugated Fiberboard,

B/C-Flute

Manufacture's Joint: Inside Glued 1-5/8" lap.

Outside Dimensions:

14-1/8" L x 9-3/4" W x 15-1/2" H

Case Sealing:

(1) Top: Strip of 3M # 375 Pressure Sensitive Tape, 2" Minimum Overlap

(2) Bottom: Strip of 3M # 375 Pressure Sensitive Tape, 2" Minimum Overlap

Note: Substitution of any of the components listed above

may render the UN certification invalid

Packaging Suitability

- Packaging has been certified for Packaging Group II and III liquids with specific Gravity not exceeding 1.5 with Authorized Gross Mass 34.0 kg (74.96 lbs).
- 2. This Package is not Certified for Air Shipment

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

4G Twin Pack in Fiberboard Box

PRE-CERTIFIED UN 4G PACKAGING

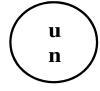
Packaging Assembly:

- 1. Once filled, the closure must be applied to the bottle using an application torque of 100 in-lbs (8.3 ft-lbs) using a torque wrench with a force indicator.
- 2. The bottom of the reshipper is sealed with a strip of 3M # 375 Pressure Sensitive Tape with a 2" minimum overlap.
- 3. The Inner Packages (bottles) are then seated side-by-side into the taped bottom reshipper.
- 4. The top flaps of the reshipper are folded down and sealed with a strip of 3M # 375 Pressure Sensitive Tape with a 2" minimum overlap.

Note: • Package not intended for reuse.

 Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



4G / Y34.0 / S / ** USA / +AA4377

| <u>Marking</u> | <u>Explanation</u> |
|----------------|--|
| 4G | Packaging Identification Code 4G Box, Fiberboard |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) which covers Packing Group II & III liquid hazardous materials |
| 34.0 | Authorized package gross mass in Kg |
| S | Denotes Inner packaging |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +AA4377 | Packaging tested and certified by a DOT Third Party Certification Agency |

NOTIFICATION: CFR TITLE 49 PART 178.2 (c)

2 1/2 Gallon Jerrican with Threaded Opening (MOLD 151)

PRE-CERTIFIED UN 3H1 PACKAGING

2.5 Gallon Plastic Jerrican with 63mm Neck Finish

COMPONENT CHECK LIST:

Quantity Description

X

(1) Primary Closure: SC63R Low Density Polyethylene

63mm Threaded Closure with 3/4" Reducer. Gasket: White EPDM 2.362"D. X 0.089"mm Thick

Finish Style: 63mm Buttress

X

(1) Jerrican: 2.5 Gallon, High Density Polyethylene

Finish Style: 63mm Buttress

Note: Substitution of any of the components listed above

may render the UN certification invalid

Packaging Suitability

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.6
- 2. The internal pressure test required for air shipment has been conducted Test Level = 100 kPa (14.5 psi; refer to 173.24a(b)(4))

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

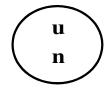
| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 2 1/2 Gallon Jerrican with Threaded Opening (MOLD 151) |
|---|--|
| PRE-CERTIFIED UN 3H1 PACKAGING | 2.5 Gallon Plastic Jerrican with 63mm Neck Finish. |
| Packaging Assembly: | |

1. Once filled, the primary closure must be applied to the bottle using an application torque of 150 in-lbs (12.5 ft-lbs) using a torque wrench with force indicator.

Note: • Package not intended for reuse.

 Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



3H1 / Y1.6 / 100 / ** USA / +CC6578

| <u>Marking</u> | <u>Explanation</u> |
|----------------|--|
| 3H1 | Packaging Identification Code 3H1, Jerrican, Plastic, Closed Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 1.6 | Maximum product Specific Gravity |
| 100 | Denotes Internal Test Pressure of 100 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC6578 | Packaging tested and certified by a DOT Third Party Certification Agency |

NOTIFICATION: CFR TITLE 49 PART 178.503(c) 3H1 Jerrican, 18 mm Secondary Vent Closure (Mold # 159)

PRE-CERTIFIED UN 3H1 PACKAGING

5 Gallon Plastic Jerrican with Tamper Evident Neck Finish & 18mm Vent.

COMPONENT CHECK LIST:

Quantity Description

.

X

(1) Primary Closure: SC70EPDMTE-3/4 High Density Polyethylene

70mm Tamper Evident Buttress Threaded Closure with 3/4 Reducer.

Gasket: White EPDM 2.49" O.D. X 2.13" I.D. X 0.120"mm Thick

Finish Style: 70mm Buttress

X (1) Vent Access Closure:

Air Vent Threads: 18mm

Closure: Cap, PolySeal, C18/400 FRST Polypropylene, White.

Liner: Laminated PE Foam. Glued In.

(1) Jerrican: 5 Gallon, High Density Polyethylene

Finish Style: 70mm Buttress

Note: Substitution of any of the components listed above

may render the UN certification invalid

Packaging Suitability

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.8
- 2. The internal pressure test required for air shipment has been conducted Test Level = 100 kPa (14.5 psi; refer to 173.24a(b)(4))

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

| NOTIFICATION: CFR TITLE 49 PART 178.503 (c) | 3H1 Jerrican, 18 mm Secondary Vent Closure (Mold # 159) |
|---|--|
| PRE-CERTIFIED UN 3H1 PACKAGING | 5 Gallon Plastic Jerrican with Tamper Evident Neck Finish & 18mm Vent. |

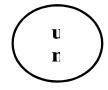
Packaging Assembly:

- 1. Once filled, the primary closure must be applied to the bottle using an application torque of 120 in-lbs (10 ft-lbs) using a torque wrench with force indicator.
- 2. Once filled, the packager must ensure that the vent access closure is tightened 15 In-lbs using snap on torque wrench on the jerrican to preclude loss in shipment.

Note: • Once the 18mm vent has been punctured or broken, the package is no longer UN certified and therefore should not be used to transport any regulated ladings.

- Package not intended for reuse.
- Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



3H1 / Y1.8 / 100 / ** USA / +CC8002

| <u>Marking</u> | Explanation |
|----------------|--|
| 3H1 | Packaging Identification Code 3H1, Jerrican, Plastic, Closed Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 1.8 | Maximum product Specific Gravity |
| 100 | Denotes Internal Test Pressure of 100 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC8002 | Packaging tested and certified by a DOT Third Party Certification Agency |
| | |

4G 1X5 GALLON SQUARE SAMSON PAK MOLD# 158

PRE-CERTIFIED UN 4G PACKAGING

5 Gallon Plastic Jerrican with Tamper Evident Neck Finish & 18mm Vent.

COMPONENT CHECK LIST:

Quantity Description

(1)

X

Primary Closure: SC70EPDMTE-3/4 High Density Polyethylene

70mm Tamper Evident Buttress Threaded Closure with 3/4 Reducer.

Gasket: White EPDM 2.49" O.D. X 2.13" I.D. X 0.120"mm Thick

Finish Style: 70mm Buttress

X (1) Vent Access Closure:

Air Vent Threads: 18mm

Closure: Cap, PolySeal, C18/400 FRST Polypropylene, White.

Liner: Laminated PE Foam. Glued In.

(1) Jerrican: 5 Gal Samson PAK, High Density Polyethylene

Finish Style: 70mm Buttress

X (1) Outer Shipper:

51 ECT Double Wall Mottled White Corrugated Fiberboard; B/C-Flute

Manufacture's Joint: Inside Glued 1-3/8" LP

Outside Dimensions: 10-3/4" L X 10-1/2" W X 16-1/4" H

Case Sealing:

(1) Top: Strip of 3M # 375 pressure Sensitive Tape, 2" Minimum Overlap

(2) Bottom: Strip of 3M # 375 pressure Sensitive Tape, 2" Minimum Overlap

Note: Substitution of any of the components listed above

may render the UN certification invalid

Packaging Suitability

1. Packaging has been certified for Packaging Group II and III Liquids. with specific gravities not exceeding 1.7

2. This Package is not Certified for Air Shipment

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

4G 1X5 GALLON SQUARE SAMSON PAK MOLD# 158

PRE-CERTIFIED UN 4G PACKAGING

5 Gallon Plastic Jerrican with Tamper Evident Neck Finish & 18mm Vent.

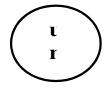
Packaging Assembly:

- 1. Once filled, the primary closure must be applied to the bottle using an application torque of 120 in-lbs (10 ft-lbs) using a torque wrench with force indicator.
- 2. Once filled, the packager must ensure that the vent access closure is tightened 15 In-lbs using snap on torque wrench on the jerrican to preclude loss in shipment.

Note: • Once the 18mm vent has been punctured or broken, the package is no longer UN certified and therefore should not be used to transport any regulated ladings.

- Package not intended for reuse.
- Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



Mauldina

4G / Y33 / S / **

Cymlonetics

| <u> Marking</u> | <u>Explanation</u> |
|-----------------|--|
| 4G | Packaging Identification Code 4G Box, Fiberboard. |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) which covers Packing Group II & III liquid hazardous materials |
| 33.0 | Authorized package gross mass in Kg |
| S | Denotes inner packaging |
| 100 | Denotes Internal Test Pressure of 100 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC8818 | Packaging tested and certified by a DOT Third Party Certification Agency |
| | |

3H1 Jerrican, 18 mm Secondary Vent Closure

PRE-CERTIFIED UN 3H1 PACKAGING

5 or 6 Gallon Plastic Jerrican with Tamper Evident Neck Finish & 18mm Vent Mold 176.

COMPONENT CHECK LIST:

Quantity Description

X

(1) Primary Closure: SC70EPDMTE-3/4 High Density Polyethylene

70mm Tamper Evident Buttress Threaded Closure with 3/4 Reducer.

Gasket: White EPDM 2.49" O.D. X 2.13" I.D. X 0.120"mm Thick

Finish Style: 70mm Buttress

X

(1) Vent Access Closure:

Air Vent Threads: 18mm

Closure: Cap, PolySeal, C18/400 FRST Polypropylene, White.

Liner: Laminated PE Foam. Glued In.

X

(1) Jerrican: 5 or 6 Gallon, High Density Polyethylene

Finish Style: 70mm Buttress

Note:

Substitution of any of the components listed above

may render the UN certification invalid

Packaging Suitability

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.8
- 2. The internal pressure test required for air shipment has been conducted Test Level = 100 kPa (14.5 psi; refer to 173.24a(b)(4))

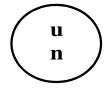
- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 3H1 Jerrican, 18 mm Secondary Vent Closure |
|---|--|
| PRE-CERTIFIED UN 3H1 PACKAGING | 5 or 6 Gallon Plastic Jerrican with Tamper Evident Neck Finish & 18mm Vent Mold 176. |
| Deckering Accembly: | |

Packaging Assembly:

- 1. Once filled, the primary closure must be applied to the bottle using an application torque of 120 in-lbs (10 ft-lbs) using a torque wrench with force indicator.
- 2. Once filled, the packager must ensure that the vent access closure is tightened 15 In-lbs using snap on torque wrench on the jerrican to preclude loss in shipment.
- Note: Once the 18mm vent has been punctured or broken, the package is no longer UN certified and therefore should not be used to transport any regulated ladings.
 - Package not intended for reuse.
 - Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



3H1 / Y1.8 / 100 / ** USA / +AA2647

| <u>Marking</u> | Explanation |
|----------------|--|
| 3H1 | Packaging Identification Code 3H1, Jerrican, Plastic, Closed Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 1.8 | Maximum product Specific Gravity |
| 100 | Denotes Internal Test Pressure of 100 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +AA2647 | Packaging tested and certified by a DOT Third Party Certification Agency |

3H1 Jerrican, 2" Internal Buttress

PRE-CERTIFIED UN 3H1 PACKAGING

5 or 6 Gallon Plastic Jerrican with Internal 2" Threaded Buttress Opening Mold 176.

COMPONENT CHECK LIST:

Quantity Description

X

(1) Primary Closure: PPA-57-B-5. High Density Polyethylene

2" Threaded Buttress Plug.

Gasket: White EPDM 0.144" W x 2.78" D.

X

(1) Jerrican: 5 or 6 Gallon High Density Polyethylene

Finish Style: 2" internal Buttress.

Note:

Substitution of any of the components listed above may render the UN certification invalid

Packaging Suitability

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.8
- 2. The internal pressure test required for air shipment has been conducted Test Level = 100 kPa (14.5 psi; refer to 173.24a(b)(4))

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

3H1 Jerrican, 2" Internal Buttress

PRE-CERTIFIED UN 3H1 PACKAGING

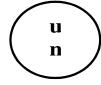
5 or 6 Gallon Plastic Jerrican with Internal 2" Threaded **Buttress Opening Mold 176.**

Packaging Assembly:

1. Once filled, the primary closure must be applied to the bottle using an application torque of 150 in-lbs using a torque wrench with force indicator.

- Note: Once the 18mm vent has been punctured or broken, the package is no longer UN certified and therefore should not be used to transport any regulated ladings.
 - Package not intended for reuse.
 - Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



3H1 / Y1.8 / 100 / ** USA / +CC5261

| <u>Marking</u> | <u>Explanation</u> |
|----------------|--|
| 3H1 | Packaging Identification Code 3H1, Jerrican, Plastic, Closed Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) which covers Packing Group II & III liquid hazardous materials |
| 1.8 | Maximum product Specific Gravity |
| 100 | Denotes Internal Test Pressure of 100 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC5261 | Packaging tested and certified by a DOT Third Party Certification Agency |

NOTIFICATION: CFR TITLE 49 PART 178.503(c) 3H1 Jerrican, 18 mm Secondary Vent Closure (Mold # 173)

PRE-CERTIFIED UN 3H1 PACKAGING

5 Gallon Plastic Jerrican with Tamper Evident Neck Finish & 18mm Vent.

COMPONENT CHECK LIST:

Quantity Description

X

(1) Primary Closure: SC70EPDMTE-3/4 High Density Polyethylene

70mm Tamper Evident Buttress Threaded Closure with 3/4 Reducer.

Gasket: White EPDM 2.49" O.D. X 2.13" I.D. X 0.120"mm Thick

Finish Style: 70mm Buttress

X

(1) Vent Access Closure:

Air Vent Threads: 18mm

Closure: Cap, PolySeal, C18/400 FRST Polypropylene, White.

Liner: Laminated PE Foam. Glued In.

X

(1) Jerrican: 5 Gallon, High Density Polyethylene

Finish Style: 70mm Buttress

Note: Substitution of any of the components listed above

may render the UN certification invalid

Packaging Suitability

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.8
- 2. The internal pressure test required for air shipment has been conducted Test Level = 100 kPa (14.5 psi; refer to 173.24a(b)(4))

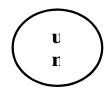
- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

| NOTIFICATION: CFR TITLE 49 PART 178.503 (c) | 3H1 Jerrican, 18 mm Secondary Vent Closure (Mold # 173) |
|---|--|
| PRE-CERTIFIED UN 3H1 PACKAGING | 5 Gallon Plastic Jerrican with Tamper Evident Neck Finish & 18mm Vent. |

Packaging Assembly:

- 1. Once filled, the primary closure must be applied to the bottle using an application torque of 120 in-lbs (10 ft-lbs) using a torque wrench with force indicator.
- 2. Once filled, the packager must ensure that the vent access closure is tightened 15 In-lbs using snap on torque wrench on the jerrican to preclude loss in shipment.
- Note: Once the 18mm vent has been punctured or broken, the package is no longer UN certified and therefore should not be used to transport any regulated ladings.
 - Package not intended for reuse.
 - Failure to follow the packaging assembly instructions listed above may render the UN certification invalid

Explanation of UN Marking



3H1 / Y1.8 / 100 / ** USA / +CC11408

| <u>Marking</u> | Explanation |
|----------------|--|
| 3H1 | Packaging Identification Code 3H1, Jerrican, Plastic, Closed Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 1.8 | Maximum product Specific Gravity |
| 100 | Denotes Internal Test Pressure of 100 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC8002 | Packaging tested and certified by a DOT Third Party Certification Agency |

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and |
|---|-----------------------------------|
| | 500 Series Plain Cover |

Quantity Description (1) 500 Series High Density Polyethylene Plain Cover (Mold # 60) White EPDM Tubular O-Ring Gasket, 0.265" O.D. X 0.055" Wall (1) 20 Liter UN 1H2 Series 500 High Density Polyethylene Open Head Pail Mold # 26

Packaging Suitability

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.4
- 2. The internal pressure test required for air shipment has been conducted. Test Level = 30 kPa (4.35 psi; refer to 173.24a(b)(4)).

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and 500 Series Plain Cover |
|---|--|
| PRE-CERTIFIED UN 1H2 PACKAGING | 20 Liter UN 1H2 Open Head Pail Mold#26 & |

Packaging Assembly:

1. Once filled, the series 500 cover must be applied to the series 500 pail by the following closure method:

A. Pneumatic Press

- 1. Platten must have 3 by 1 inch burp plug.
- 2. Adjust the stroke of the closing platen to 1/4" past the top of the pail (without cover). (fig. 1)
- 3. Adjust the pnumatic press to 100 PSI of force.
- 4. Center the pail and cover underneath the closing platen. (fig. 2)
- 5. Activate the pneumatic closer so that it snaps the cover onto the pail curl. (fig. 3)







Mold#60 plain cover

Figure 2



Figure 3

b. Manual (Rubber Mallet)

Using a 24oz rubber mallet strike the cover flat in the center of the outer ring until it snaps the cover onto the pail. Follow this process of striking the cover with a flat (24oz) mallet as shown on the attached figure (5) until the cover is evenly seated on the pail.



Figure 4



Figure 5

20 Liter UN 1H2 Open Head Pail Mold#26 & Mold#60 plain cover

When properly applied with either method A or B. The undercut of the API UN series 500 cover is fully engaged with the rim/curl of the pail in a manner which precludes the contents to leak from the package.



Figure 6

2. When properly closed, the API UN Series 500 Cover is evenly seated all around the API UN Series 500 pail and measures approximately 1 1/16" from the bottom of the UN Series 500 Cover to the top satellite ring (Fig 6).

Note: • Package not intended for reuse.

 Failure to follow the packaging assembly instruction listed above may render the UN certification invalid

Explanation of UN Marking



1H2 / Y1.4 / 30 / ** USA / +CC5614

| <u>Marking</u> | <u>Explanation</u> |
|----------------|--|
| 1H2 | Packaging Identification Code 1H2 Drum, Plastic, Open Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 1.4 | Maximum product Specific Gravity |
| 30 | Denotes Internal Test Pressure of 30 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC5614 | Packaging tested and certified by a DOT Third Party Certification Agency |
| | |

| NOTIFICATIO | ON: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and 500 SERIES Cover With Flexspout Opening |
|--------------------------------|--|---|
| PRE-CERTIFIED UN 1H2 PACKAGING | | 20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 With Flexspout Opening |
| Quantity | Description | |
| (1) | Primary Closure: FS10-10-231 Self-\ Neck Finish Seal | Venting w/ Tear away Tamper Evident |
| (1) | 20 Liter UN 1H2 Series High Density I White EPDM Tubular O-Ring Gasket, | Polyethylene 500 Cover Mold # 60 0.265" O.D. X 0.055" Wall x 35.50" Length |
| (1) | 20 Liter UN 1H2 Series 500 High Den | sity Polyethylene Open Head Pail Mold # 26 |

Packaging Suitability

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.4
- 2. The internal pressure test required for air shipment has been conducted. Test Level = 30 kPa (4.35 psi; refer to 173.24a(b)(4)).

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and |
|---|---|
| | 500 SERIES Cover With Flexspout Opening |

20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 With Flexspout Opening

Packaging Assembly:

- 1. If not already assembled, insert Flex spout closure FS10-10-231 into API UN series 500 Cover and crimp Flex spout closure to cover using a Rieke FS600#01447 Crimping Tool
- 2. Once filled, the series 500 cover must be applied to the series 500 pail by the following closure method:

A. Pneumatic Press with.

- 1. Platten must have 3 by 1 inch burp plug.
- 2. Adjust the stroke of the closing platen to 1/4" past the top of the pail (without cover). (fig. 1)
- 3. Adjust the pnumatic press to 100 PSI of force.
- 4. Center the pail and cover underneath the closing platen. (fig. 2)
- 5. Activate the pneumatic closer so that it snaps the cover onto the pail curl. (fig. 3)



Figure 1



Figure 2



Figure 3

b. Manual (Rubber Mallet)

Using a 24oz rubber mallet strike the cover flat in the center of the outer ring until it snaps the cover onto the pail. Follow this process of striking the cover with a flat (24oz) mallet as shown on the attached figure (5) until the cover is evenly seated on the pail.



Figure 4



Figure 5

20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 With Flexspout Opening

When properly applied with either method A or B. The undercut of the API UN series 500 cover is fully engaged with the rim/curl of the pail in a manner which precludes the contents to leak from the package.



Figure 6

2. When properly closed, the API UN Series 500 Cover is evenly seated all around the API UN Series 500 pail and measures approximately 1 1/16" from the bottom of the UN Series 500 Cover to the top satellite ring (Fig 6).

Note: • Package not intended for reuse.

 Failure to follow the packaging assembly instruction listed above may render the UN certification invalid

Explanation of UN Marking



1H2 / Y1.4 / 30 / ** USA / +CC5614

| <u>Marking</u> | <u>Explanation</u> |
|----------------|--|
| 1H2 | Packaging Identification Code 1H2 Drum, Plastic, Open Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 1.4 | Maximum product Specific Gravity |
| 30 | Denotes Internal Test Pressure of 30 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC5614 | Packaging tested and certified by a DOT Third Party Certification Agency |

| NOTIFICATIO | ON: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and 500 Series Cover with 70MM Vented Screw Cap |
|-------------|-----------------------------------|--|
| PRE-CERTIFI | ED UN 1H2 PACKAGING | 20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 Vented 70mm threaded Norton Closure |
| Quantity | Description | |
| (1) | Primary Closure: MF-SC70VL 70mr | m Vented Threaded Closure. |

(1) 20 Liter UN 1H2 Series 500 Open Head Pail Mold # 26

20 Liter UN 1H2 Series 500 Cover Mold # 60

Packaging Suitability

(1)

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.4
- 2. The internal pressure test required for air shipment has been conducted. Test Level = 30 kPa (4.35 psi; refer to 173.24a(b)(4)).

White, EPDM, Tubular O-Ring Gasket, 0.265" O.D. X 0.055" Wall.

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and |
|---|-------------------------------------|
| | 500 SERIES Cover With 70MM Srew Cap |

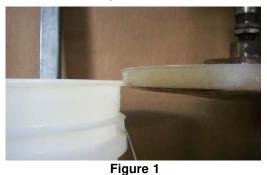
20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 Vented 70mm threaded Norton Closure

Packaging Assembly:

- 1. If not already assembled, primary closure must be applied to the API UN series 500 Cover using an application torque of 150 in-lbs (12.49 ft-lbs), using a torque wrench with force indicator.
- 2. Once filled, the series 500 cover must be applied to the series 500 pail by the following closure method:

A. Pneumatic Press with.

- 1. Platten must have 3 by 1 inch burp plug.
- 2. Adjust the stroke of the closing platen to 1/4" past the top of the pail (without cover). (fig. 1)
- 3. Adjust the pnumatic press to 100 PSI of force.
- 4. Center the pail and cover underneath the closing platen. (fig. 2)
- 5. Activate the pneumatic closer so that it snaps the cover onto the pail curl. (fig. 3)





b. Manual (Rubber Mallet)

Figure 2 Figure 3

Using a 24oz rubber mallet strike the cover flat in the center of the outer ring until it snaps the cover onto the pail. Follow this process of striking the cover with a flat (24oz) mallet as shown on the attached figure (5) until the cover is evenly seated on the pail.



Figure 4



Figure 5

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and |
|---|-------------------------------------|
| | 500 SERIES Cover With 70MM Srew Cap |

20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 With Flexspout Opening

When properly applied with either method A or B. The undercut of the API UN Series 500 cover is fully engaged with the rim/curl of the pail in a manner which precludes the contents to leak from the package.



Figure 6

- 2. When properly closed, the API UN Series 500 Cover is evenly seated all around the API UN Series 500 pail and measures approximately 1 1/16" from the bottom of the UN Series 500 Cover to the top satellite ring (Fig 6).
- Note: Package not intended for reuse.
 - Failure to follow the packaging assembly instruction listed above may render the UN certification invalid

Explanation of UN Marking



1H2 / Y1.4 / 30 / ** USA / +CC5614

| <u>Marking</u> | Explanation |
|----------------|--|
| 1H2 | Packaging Identification Code 1H2 Drum, Plastic, Open Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 1.4 | Maximum product Specific Gravity |
| 30 | Denotes Internal Test Pressure of 30 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC5614 | Packaging tested and certified by a DOT Third Party Certification Agency |

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | | • |
|---|------------------------|---|
| | | 500 SERIES Cover w/All-Plastic Flexspout Opening |
| PRE-CERTIFIED UN 1H2 PACKAGING | | 20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 With All-Plastic Flexspout Opening |
| Quantity | Description | |
| (1) | • | 6-231-TFE1 All-Plastic Self-Venting w/ Tear away Tamper Evident Finish Seal |
| (1) | | High Density Polyethylene 500 Cover Mold # 60 Ring Gasket, 0.265" O.D. X 0.05" Wall |
| (1) | 20 Liter UN 1H2 Series | 500 High Density Polyethylene Open Head Pail Mold # 26 |

Packaging Suitability

- 1. Packaging has been certified for Packaging Group II and III liquids with specific gravities not exceeding 1.4
- 2. The internal pressure test required for air shipment has been conducted. Test Level = 30 kPa (4.35 psi; refer to 173.24a(b)(4)).

- 1. The packaging is authorized for the intended hazardous material.
- 2. The packaging is compatible with its lading, and
- 3. The packaging meets all general shipper requirements of 173.24 and 173.24 (a).

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and |
|---|--|
| | 500 SERIES Cover w/All-Plastic Flexspout Opening |

20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 With All-Plastic Flexspout Opening

Packaging Assembly:

- 1. If not already assembled, insert All-Plastic Flexspout closure FS-16-231-TFE1 into API UN series 500 Cover and insert all-plastic flexspout to cover using a Rieke IAFS-700-02A All-Plastic Insertion Tool.
- 2. Once filled, the series 500 cover must be applied to the series 500 pail by the following closure method:

A. Pneumatic Press with.

- 1. Platten must have 3 by 1 inch burp plug.
- 2. Adjust the stroke of the closing platen to 1/4" past the top of the pail (without cover). (fig. 1)
- 3. Adjust the pnumatic press to 100 PSI of force.
- 4. Center the pail and cover underneath the closing platen. (fig. 2)
- 5. Activate the pneumatic closer so that it snaps the cover onto the pail curl. (fig. 3)



Figure 1



Figure 2



Figure 3

b. Manual (Rubber Mallet)

Using a 24oz rubber mallet strike the cover flat in the center of the outer ring until it snaps the cover onto the pail. Follow this process of striking the cover with a flat (24oz) mallet as shown on the attached figure (5) until the cover is evenly seated on the pail.



Figure 4



Figure 5

| NOTIFICATION: CFR TITLE 49 PART 178.2 (c) | 1H2 Open Head 500 Series Pail and |
|---|--|
| | 500 SERIES Cover w/All-Plastic Flexspout Opening |

20 Liter UN 1H2 Open Head Pail Mold#26 & Cover Mold#60 With All-Plastic Flexspout Opening

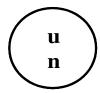
When properly applied with either method A or B. The undercut of the API UN series 500 cover is fully engaged with the rim/curl of the pail in a manner which precludes the contents to leak from the package.



Figure 6

- 2. When properly closed, the API UN Series 500 Cover is evenly seated all around the API UN Series 500 pail and measures approximately 1 1/16" from the bottom of the UN Series 500 Cover to the top satellite ring (Fig 6).
- Note: Package not intended for reuse.
 - Failure to follow the packaging assembly instruction listed above may render the UN certification invalid

Explanation of UN Marking



1H2 / Y1.4 / 30 / ** USA / +CC5614

| <u>Marking</u> | <u>Explanation</u> |
|----------------|--|
| 1H2 | Packaging Identification Code 1H2 Drum, Plastic, Open Head |
| Υ | Packaging has been certified at Packaging group II, Test Levels (Y) |
| | which covers Packing Group II & III liquid hazardous materials |
| 1.4 | Maximum product Specific Gravity |
| 30 | Denotes Internal Test Pressure of 30 kPa (refer to 173.24a(b)(4)) |
| ** | Insert 2 digit year the packaging was manufactured ("23" = 2023) |
| USA | Country authorizing allocation of the marking |
| +CC5614 | Packaging tested and certified by a DOT Third Party Certification Agency |

NOTIFICATION: CFR TITLE 49 PART 178.601 (ABRIDGEMENT)

General Requirements & Variation 5

The information below is an abridgment of the Code of Federal Regulation (CFR 49) Sec 178.601 and includes information on **General Requirements** and **Variation 5**. The provided sections are intended to serve as a quick reference to frequently asked question only.

For a complete listing of \$178.601 General requirements, please visit www.myregs.com/dotrspa/ or visit our website at www.apikirkcontainers.com and click on a link at the bottom of the "products" page.

§178.601 General requirements.

- (a) General. The test procedures prescribed in this subpart are intended to ensure that packages containing hazardous materials can withstand normal conditions of transportation and are considered minimum requirements. Each packaging must be manufactured and assembled so as to be capable of successfully passing the prescribed tests and of conforming to the requirements of § 173.24 of this subchapter at all times while in transportation.
- (b) Responsibility. It is the responsibility of the packaging manufacturer to assure that each package is capable of passing the prescribed tests. To the extent that a package assembly function, including final closure, is performed by the person who offers a hazardous material for transportation, that person is responsible for performing the function in accordance with §§ 173.22 and 178.2 of this subchapter.

Variation 5

- (5) Variation 5. Single packagings (i.e., non-bulk packagings other than combination packagings), that differ from a tested design type only to the extent that the closure device or gasketing differs from that used in the originally tested design type, may be used without further testing, provided an equivalent level of performance is maintained, subject to the following conditions (the qualifying tests):
- ▶ (i) A packaging with the replacement closure devices or gasketing must successfully pass the drop test specified in § 178.603 in the orientation which most severely tests the integrity of the closure or gasket;
- ▶ (ii) When intended to contain liquids, a packaging with the replacement closure devices or gasketing must successfully pass the leakproofness test specified in § 178.604, the hydrostatic pressure test specified in § 178.605, and the stacking test specified in § 178.606. Replacement closures and gasketings qualified under the above test requirements are authorized without additional testing for packagings described in paragraph (g)(3) of this section. Replacement closures and gasketings qualified under the above test requirements also are authorized without additional testing for different tested design types packagings of the same type as the originally tested packaging, provided the original design type tests are more severe or comparable to tests which would otherwise be conducted on the packaging with the replacement closures or gasketings. (For example: The packaging used in the qualifying tests has a lesser packaging wall thickness than the packaging with replacement closure devices or gasketing; the gross mass of the packaging used in the qualifying drop test equals or exceeds the mass for which the packaging with replacement closure devices or gasketing was dropped from the same or greater height than the height from which the packaging with replacement closure devices or gasketing was dropped in design type tests; and the specific gravity of the substance used in the qualifying drop test was the same or greater than the specific gravity of the liquid used in the design type tests of the packaging with replacement closure devices or gasketing.)

WI 42-05-2 REV H UN NOTIFICATION MANUAL.xls