



Thermal Insulation Chemicals

TIC CORPORATION

Product Data Sheet TIC 4015/16 CSM Vapor Barrier Mastic

Description

TIC 4015/16 CSM Vapor Barrier Mastic based on Chlorosulfonated polyethylene rubber is a tough, flexible, fire-resistive elastomeric finish for protection of thermal insulation. It also used as a Vapor barrier finish for fittings. It is excellent for outdoor use where good color retention, chemical resistance, and durability are required.

TIC 4015/16 CSM Vapor Barrier Mastic provides outstanding weather barrier and Vapor barrier protection for most board stock thermal insulations except polystyrene. It normally bonds well to aluminum foil facings, but test application recommends to confirm adhesion.

TIC 4015/16 CSM Vapor Barrier Mastic contains no asbestos, lead, mercury, or mercury compounds.

Properties

Property	Specification	Test method
Color	Aluminum (gray)	TSTM-01
Application	Trowel, caulking gun, or power extrusion equipment	TSTM-06
Density	1.13 ± 0.02 kg/ℓ	ASTM D 1475
Volume non-volatile	35 ± 1 %	ASTM D 1644
Weight non-volatile	52 ± 1 %	ASTM D 1644
Coverage	3.81 ~ 5.70 kg/m ² (3.43 ~ 5.14 ℓ/m ²) Dried film thickness: 1.2 ~ 1.8 mm	TSTM-07
Drying time	Set to touch: 3 hours Dry through: 48 hours	ASTM D 1640
Service temperature limits	(Temperature at coated surface) -40°C ~ 121°C (-40°F ~ 250°F)	TSTM-04
Water Vapor permeance	≤ 0.02 perms (DFT 0.8 mm)	ASTM E 96
Wet flammability	≥ 44°C (111°F)	ASTM D 93
Surface burning characteristics	Classification: CLASS A Flame spread: 20 (0~25) Smoke developed: 35 (0~450) Surface: Applied over fiber reinforced cement board at a coverage rate of 25 sq.ft/gal (0.61 m ² /ℓ)	ASTM E 84

Limitations

Store and apply between 4 °C (40 °F) and 38 °C (100 °F).

Always test plastic materials for compatibility when using a solvent base product.

Make certain this product is completely dry and the area free from solvent odor if food is involved.

Select TIC 4010/11 CSM Vapor Barrier Coating for brush or airless spray application.

- ❖ Chlorosulfonated polyethylene rubber is generally called Hypalon, the Trademark of DuPont Performance Elastomers, and is not produced by DuPont anymore.

Application Guide TIC 4015/16 CSM Vapor Barrier Mastic

Material Preparation Stir well. DO NOT THIN. Apply only to clean dry surfaces. Keep container closed when not in use to prevent solvent evaporation.

Application

- 1. Normal Service** - Apply a tack coat of TIC 4015/16 CSM Vapor Barrier Mastic at a thickness of 1/32 inch (0.8 mm). This is equivalent to 2 gal/100 sq.ft (0.8 ℓ/m²). Smooth membrane to avoid wrinkles and overlap all seams at least 2 inches (5 cm). Apply a finish coat of TIC 4015/16 CSM Vapor Barrier Mastic at a minimum thickness of 1/16 inch (1.6 mm). This is equivalent to 4 gal/100 sq.ft (1.6 ℓ/m²). This finish coat shall apply no later than 2 hours after the tack coat and shall completely cover membrane.
This application shall provide a minimum dry film thickness of 30 mils (0.7 mm).
- 2. Severe and Cryogenic Service** - After the first two coats have dried, apply an additional coat of TIC 4015/16 CSM Vapor Barrier Mastic at a thickness of 3/64 inch (1.2 mm). This is equivalent to 3 gal/100 sq.ft (1.2 ℓ/m²). This additional application shall provide a minimum dry film thickness of 44 mils (1.1 mm).
To prevent water Vapor and moisture infiltration, proper and complete flashing is required. Follow flashing specifications.
- 3. Trowel** - Use clean tools. Work in long even strokes to insure uniform thickness. Wet tool with detergent foam (not soap) occasionally to prevent a build-up of dried mastic.
- 4. Rubber Glove** - Best appearance achieved by smoothing wet TIC 4015/16 CSM Vapor Barrier Mastic with detergent foam (not soap) on clean glove or brush, being careful not to pick up any TIC 4015/16 CSM Vapor Barrier Mastic onto the glove or trowel.

Clean-up Use xylene (flammable) or chlorinated solvent (non-flammable) for cleaning equipment. (Dried TIC 4015/16 CSM Vapor Barrier Mastic is extremely difficult to remove).

Note

Important: We make no other warranties and expressly disclaim any warranties of merchantability or fitness for a particular purpose. If a product fails to meet this limited warranty, purchaser's sole and exclusive remedy is replacement of the product or, at our option, refund of the purchase price. Our acceptance of any orders for the product is expressly conditional upon purchaser's assent to the terms on the applicable invoice.

Adequate Tests: The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. The shelf life can be affected by storage and handling conditions. When products are stored in the original unopened container in an enclosed area and protected from contamination, moisture and extreme temperatures, the warranted shelf life is twelve months from the date of shipment to the original purchaser.