

Product Data Sheet TIC 4050/51 Vapour Barrier Coating

Description

TIC 4050/51 Vapour Barrier Coating is tough flexible fire-resistive elastomeric finish for protection of outdoor thermal insulation. It contains Chlorosulfonated polyethylene rubber. It is excellent vapour barrier for low temperature insulation on tanks, pipe-work, vessels, ductwork, and fittings.

TIC 4050/51 Vapour Barrier Coating provides outstanding weather barrier protection, showing good color retention, excellent chemical resistance, and durability. It has excellent resistance to UV and sunlight.

TIC 4050/51 Vapour Barrier Coating provides outstanding weather barrier and vapour barrier protection for sprayed polyurethane foam in outdoor locations. It is one-component, high film strength product, usually apply it in two coats with standard airless spray equipment. It sprays easily and cleanly with a minimum of cobweb.

TIC 4050/51 Vapour Barrier Coating is ideal finish for flexible cellular insulation tubing and sheets. Apply by brush in two coats.

TIC 4050/51 Vapour Barrier Coating contains no asbestos, lead, mercury or mercury compounds.

Properties

Property	Specification	Test method
Color	TIC 4050 White / TIC 4051 Gray	TSTM-01
Application	Brush or airless spray	TSTM-06
Density	1.15 ± 0.05 Kg/ℓ	ASTM D 1475
Volume non-volatile	33 ± 1 %	ASTM D 1644
Weight non-volatile	47 ± 1 %	ASTM D 1644
Coverage	2.79 Kg/m ² (2.42 ℓ/m ²) Dried film thickness: 0.8 mm	TSTM-07
Drying time	Set to touch: 4 hours Dry through: 24 hours	ASTM D 1640
Service temperature limits	(Temperature at coated surface) -46 °C ~ 121 °C (-51 °F ~ 250 °F)	TSTM-04
Water vapour permeance	≤ 0.02 perms (DFT 1.3 mm)	ASTM E 96
Wet flammability	≥ 44 °C (111 °F)	ASTM D 93
Surface burning characteristics	Classification: CLASS A Flame spread: 10 (0~25) Smoke developed: 15 (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.

Outdoor horizontal surfaces must always drain completely. A pitch of at least 1/2" per foot (4 cm/m) recommends.

Select TIC 4055/56 Vapour Barrier Mastic for trowel or glove application.

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

Application

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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

To prevent water vapor and moisture infiltration, proper and complete flashing is required. Follow flashing specifications.

- 1. Normal Service** - Apply a tack coat of TIC 4050/51 Vapour Barrier Coating at a thickness of 1/32 inch (0.8 mm). This is equivalent to 2 gal/100 sq.ft (0.8 ℓ/m^2). Smooth membrane to avoid wrinkles and overlap all seams at least 2 inches (5 cm). Apply a finish coat of TIC 4050/51 Vapour Barrier Coating at a minimum thickness of 1/16 inch (1.6 mm). This is equivalent to 4 gal/100 sq.ft (1.6 ℓ/m^2). This finish coat shall apply no later than 2 hours after the tack coat and shall completely cover membrane. This application shall provide minimum dry film thickness of 32 mils (0.8 mm).
- 2. Severe and Cryogenic Service** - After the first two coats have set, 24 hours minimum or until dry, apply an additional coat of TIC 4050/51 Vapour Barrier Coating at a thickness of 3/64 inch (1.2 mm). This is equivalent to 3 gal/100 sq.ft (1.2 ℓ/m^2). This additional application shall provide a minimum dry film thickness of 48 mils (1.2 mm).
- 3. Spray** - TIC 4050/51 Vapour Barrier Coating can be used by airless spray. For spray equipment information, please consult Airless Spray. Recommendations or contact your airless spray equipment supplier. Average viscosity range is between 10,000 - 30,000 cps.
- 4. Brush** - Use a good brush, making strokes as long as possible over the surface. Multiple coats may need to achieve the minimum dry film thickness. Do not overwork. Best appearance may be achieved by smoothing wet TIC 4050/51 Vapour Barrier Coating with a clean brush dampened with detergent (not soap) foam, being careful not to pick up any TIC 4050/51 Vapour Barrier Coating on the brush.

Clean-up

Use xylene (flammable) or chlorinated solvent (non-flammable) for cleaning equipment. (Dried TIC 4050/51 Vapour Barrier Coating 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 warranted shelf life of our products is twelve months from date of shipment to the original purchaser.

TIC CORPORATION

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Rev 3.1