



Thermal Insulation Chemicals

TIC CORPORATION

Product Data Sheet

TIC 4075

Vapor-Silver Mastic

Description

TIC 4075 Vapor-Silver Mastic is weatherproof water Vapor barrier designed to protect insulation systems applied to equipment operating below ambient temperatures located in most industrial environments.

TIC 4075 Vapor-Silver Mastic is a co-polymer based compound, which dries to form a high build, light reflective Vapor barrier coating resistant to mild acids, alkalis, aliphatic solvents and oil. When used with a reinforcing membrane it will withstand some mechanical abuse.

TIC 4075 Vapor-Silver Mastic is suitable for use over cork, polyurethane, polyisocyanurate, phenolic resin and cellular glass insulation.

TIC 4075 Vapor-Silver Mastic is not suitable for use over expanded polystyrene or other solvent sensitive foams.

TIC 4075 Vapor-Silver Mastic contains no asbestos, lead, mercury or mercury compounds

Properties

Property	Specification	Test method
Color	Silver (Aluminum)	TSTM-01
Application	Trowel, Glove	TSTM-06
Density	1.25 ± 0.02 kg/ℓ	ASTM D 1475
Volume non-volatile	49 ± 1 %	ASTM D 1644
Weight non-volatile	60 ± 1 %	ASTM D 1644
Coverage	3.06 kg/m ² (2.45 ℓ/m ²) Dried film thickness: 1.2 mm	TSTM-07
Drying time	Set to touch: 4 hours Dry through: 72 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 1.2 mm)	ASTM E 96
Wet flammability	≥ 44°C (111°F)	ASTM D 93

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.



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Application Guide

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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

Cold storage vessels: TIC 4075 Vapor-Silver Mastic will provide a weather proof water Vapor barrier on cold storage vessels to reduce the transmission of water Vapor towards the cold surface and avoid failure of the insulation system.

1. Guide Specification:

- 1) The mastic as detailed shall be TIC 4075 Vapor-Silver Mastic.
- 2) All surfaces must be dry and free of contamination, all joints sealed and no damage done before application.
- 3) Using a clean trowel apply a first coat of TIC 4075 Vapor-Silver Mastic at a uniform rate of not less than 1 ℓ/m² to give a minimum applied film thickness of 1 mm.
- 4) Immediately embed Open Weave Glass Cloth No. 10 into the coating whilst wet, applying a light pressure from the center to the edge. Allow a minimum of 50 mm overlap at all adjoining edges, protrusions and terminal points.
- 5) Allow at least 16 hours for the first coat to dry.
- 6) Ensuring that after the first coat is dry and contamination free, apply a second coat of TIC 4075 Vapor-Silver Mastic at a uniform rate of not less than 1.5 liter/m² to give a minimum wet film thickness of 1.5 mm.
- 7) Allow a minimum of 3 days after the application is complete before putting the plant into service.

- 2. Site Instructions-** Store TIC 4075 Vapor-Silver Mastic within a range of 15 °C (59 °F) to 25 °C (77 °F) for 24 hours prior to use. Cut the reinforcing membrane to the required shape and size before application of the first coat. Care must be taking during application to avoid the inclusion of air in the wet coating. Where practical, application equipment shall be clean, part and used containers closed and maximum ventilation made available at the end of each working session.

Clean-up

Use xylene (flammable) or chlorinated solvent (non-flammable) for cleaning equipment. (Dried TIC 4075 Vapor-Silver 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 perform 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.