



Thermal Insulation Chemicals

TIC CORPORATION

Product Data Sheet

TIC 2070

Resistance Coating

Description

TIC 2070 Resistance Coating is a white, fire resistive, tough, washable, abrasion-resistant indoor coating for thermal insulation. It is also used as a lagging and lap adhesive for canvas and glass lagging cloth. It is good to use brushing application, which will result in better coverage, and more uniformly coated surfaces. It gives a neat white finish, and will not yellow or become discolored with age. The surface can be washed free of grease, oil, soot, and other dirt accumulation.

TIC 2070 Resistance Coating provides a protective finish for insulation on air conditioning ducts and cold-water piping when applied in 2 coats with reinforcing fabric embedded between coats. When relative humidity exceeds 75% for continuous periods, or where the insulated piping or equipment contains chilled water, brine or refrigerant, additional vapor barrier protection is suggested.

TIC 2070 Resistance Coating is good for polystyrene and polyurethane foam insulations. It can be used to the joint or edges of fibrous duct liner insulations to seal and prevent air erosion.

TIC 2070 Resistance Coating contains no asbestos, lead, mercury, or mercury compounds.

Properties

Property	Specification	Test method
Color	White	TSTM-01
Application	Brush or Spray	TSTM-06
Density	1.24 ± 0.05 kg/ℓ (10.3 lbs/gal)	ASTM D 1475
Volume non-volatile	40 ± 1 %	ASTM D 1644
Weight non-volatile	51 ± 1 %	ASTM D 1644
Coverage	3.10 kg/m ² (2.50 ℓ/m ²) Dried film thickness: 1.0 mm	TSTM-07
Drying time	Set to touch: 2 hours Dry through: 15 hours	ASTM D 1640
Service temperature limits	(Temperature at coated surface) -40 °C ~ 93 °C (-40 °F ~ 200 °F)	TSTM-04
Water vapor permeance	≤ 1.2 perms (DFT 0.8 mm)	ASTM E 96
Wet flammability	≥ 100 °C (212 °F)	ASTM D 3278
Surface burning characteristics	Classification: CLASS A Flame spread: 10 (0~25) Smoke developed: 5 (0~450) Surface: Applied over fiber reinforced cement board at a coverage rate of 40 sq. ft/gal (1.0 m ² /ℓ)	TSTM-14

Limitations

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

Be careful with freezing material until dry.

Always test foil and paper facings for acceptable adhesion before using.



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Application Guide

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Material Preparation

DO NOT THIN. Apply only to clean, dry, oil-free surfaces. Keep container closed when not in use.

Application

- Apply a tack coat of TIC 2070 Resistance Coating at 1.0 ~ 1.7 m²/ℓ (wet film thickness: 1.0 ~ 0.6 mm).
 - Immediately imbed the selected lagging fabric into the wet coating. Smooth to avoid wrinkles and overlap seams by at least 5 cm.
 - Immediately apply a finish coat at 1.0 ~ 1.7 m²/ℓ (wet film thickness: 1.0 ~ 0.6 mm). The dry film thickness of this application will vary with the fabric selected.
1. **Brush** - Use clean paint brushes (suitable for water-based paints). Apply with full brush and spread out evenly.
 2. **Spray** - TIC 2070 Resistance Coating may be airless spray applied. For spray equipment information please consult Airless Spray Recommendations or contact your airless spray equipment supplier. Average viscosity range is 25,000 - 35,000 cps. Corrosion resistant pumps and fittings are suggested.

Clean-up

Use clean fresh water for cleaning brushes and equipment before product dry. Dry product may be removed with hot soapy water or strong solvents such as chlorinated solvent (non-flammable) or mineral spirits (flammable).

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.