TIC® Thermal Insulation Chemicals
TIC CORPORATION

Product Data Sheet TIC 5080 Fire Resistive Adhesive

Description

TIC 5080 Fire Resistive Adhesive is a superior adhesive for cementing thermal insulation to all structural surfaces. It is quick setting, with good specific adhesion to iron, steel, aluminum, and most thermal insulations. It can be used without mechanical fastening for marine hull insulation.

TIC 5080 Fire Resistive Adhesive is the preferred adhesive for use with rigid polyurethane insulations. It can be used as a fabricating adhesive in making fittings, as a joint sealer and adhesive in the joints of polyurethane insulation, and as an adhesive to attach insulation to equipment surfaces. Bonds of polyurethane to itself made with TIC 5080 TIC Fire Resistive Adhesive are stronger than the base insulation.

TIC 5080 Fire Resistive Adhesive withstands continuous surface temperatures up to 149 ℃ (300℉), but it is subject to higher temperatures for short intervals with good results. Its excellent resistance to water and high humidity makes it a good sealing compound for joints and seams of insulation on cold-water piping and equipment.

TIC 5080 Fire Resistive Adhesive contains no asbestos, lead, mercury, or mercury compounds.

Properties

Property	Specification	Test method
Color	Beige	TSTM-01
Application	Trowel	TSTM-06
Density	1.47 ± 0.05 kg/ℓ	ASTM D 1475
Volume non-volatile	62 ± 1 %	ASTM D 1644
Weight non-volatile	70 ± 1 %	ASTM D 1644
Coverage	2.37 kg/㎡ (1.61 ℓ/㎡) Dried film thickness: 1.0 ㎜	TSTM-07
Bonding time range	10 ~ 20 minutes	TSTM-17
Service temperature limits	(Temperature at coated surface) -59 ℃ ~ 150 ℃ (-74℉ ~ 302℉)	TSTM-04
Wet flammability	≥ 44 ℃ (111 ℉)	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 ㎡/ℓ)	ASTM E 84
	I_s = 0 No flame spread occurred.	ASTM E 162

Limitations

Store and apply between 4 ℃ (40℉) and 38 ℃ (100℉).

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

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

Galvanized metal must be primed.

If used between impermeable surfaces, drying time will be extending. Do not heat part A, part B, or the mixed material to above 38 ℃ (100 ℉).

106, 5sandan 2-ro, Seongnam-myeon, Dongnam-gu, Cheonan-si, Chungcheongnam-do, Republic of Korea
T: +82 41 558 4252 | F: +82 41 558 9360 | E: tic@tickorea.com www.tickorea.com

TIC® Thermal Insulation Chemicals
TIC CORPORATION

Application Guide TIC 5080 Fire Resistive Adhesive

Material Preparation

Remove paper disc and any skin on surface of adhesive in container. Stir well. Apply only to clean, dry surfaces. Keep container closed when not in use to prevent solvent evaporation.

Application

1. **Attachment Adhesive** - Apply with notched trowel at 40 square feet. (1.0 ℓ/㎡).
2. **Joint Sealant/ Adhesive** - Apply with smooth trowel at 25 square feet. (0.6 ℓ/㎡). Install insulation applying pressure to assure complete and uniform contact to the surface, twisting the insulation section slightly to break any skin that may have formed on the adhesive surface.
3. **Square Notched Trowel -** Use steel trowel with square teeth 1/8 inch wide, 1/8 inch deep and 1/8 inch apart. Trowel with firm pressure leaving ridges of adhesive. Press insulation firmly into place to obtain complete contact. On rough or porous surfaces, thicker application of adhesive will be required in order to assure contact between the insulation and the substrate.

Clean-up

Use a solvent such as chlorinated solvent (non-flammable) or xylene (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 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.

106, 5sandan 2-ro, Seongnam-myeon, Dongnam-gu, Cheonan-si, Chungcheongnam-do, Republic of Korea
T: +82 41 558 4252 | F: +82 41 558 9360 | E: tic@tickorea.com www.tickorea.com