FUTURA
itw Futura Coatings

TECHNICAL DATA

Revised Date: 01/2008
Replaces Date: 11/2005

FUTURA-THANE® 5035

ELASTOMERIC POLYUREA

Product Description

A 100% solids, plural component, instant setting polyurea/polyurethane elastomer. The unique polyurea chemistry allows this elastomer to be tolerant to moisture during application to produce a dense impermeable film.

Contains a fire retardant to provide a self extinguishing membrane when run in accordance with ASTM D 635.

Features

- Moisture tolerant
- Fire retardant
- Wide range of application temperatures
- High film build per coat
- Zero VOC
- Extremely rapid cure, eliminates down time of existing installations and shortens the start up time of new installations
- Convenient application characteristics

Recommended Uses

- Protective Coating over Sprayed Polyurethane Foam
- Metal Roofing Membrane
- Protective Coating over Concrete, Metal and Wood

Typical Properties

Solids by Volume (ASTM D-1353)	100%
Volatile Organic Compounds	0.0 lbs/gal (0 g/l)
Theoretical Coverage	1604 mil ft² per gal (3.8m²/gal@1mm)
Recommend DFT	30-100 mils (750-2500 microns)
Number of coats	One or Two
Mixing Ratio (By volume)	1"A" : 1"B"
Flash Point-PMCC	>200°F (93.3°C)
Shelf Life @ 50-90°F (10-32°C)	9 mos.
Color	Aluminum

Specification Data

Elongation – ASTM D 412	300 %
Tensile Strength – ASTM D 412	2000 psi
Fire Retardancy - ASTM D635	Passes (Extinguishes in less than 5 seconds)
Low Temperature Flexibility- ASTM D 1737 1/2" mandrel bend at minus 55°F(-48°C)	Passes
Hardness – ASTM D 2240	75 Shore A
Tear Resistance – ASTM 624	250 psi

Ordering Information

Packaging:	110 gal kits
Shipping Weight:	11 lbs/gal (5 kg/gal)

APPLICATION INFORMATION
FUTURA-THANE 5035

Surface Preparation

Remove all oil, grease or other contaminants from the surface to be coated.

Apply to clean, dry, properly applied recommended primers only.

Mixing

Power mix "B" component to a uniform consistency, "A" component does not require mixing.
DO NOT BATCH MIX.

Thinning

DO NOT THIN!

Pot Life

Material Temperature	Time
60°F (15°C)	< 15 seconds
75°F (24°C)	< 15 seconds
90°F (32°C)	< 15 seconds

Application Conditions

	Normal	Minimum	Maximum
Material*	135-150°F (57-65°C)	135°F (57°C)	170°F (77°C)
Surface	75-90°F (24-32°C)	35°F (2°C)	110°F (43°C)
Ambient	75-90°F (24-32°C)	35°F (2°C)	110°F (43°C)
Humidity	30-50%	0%	85%

*Materials must be preheated to 70-90°F (21-32°C) prior to use.
Surface temperature must be 5°F (3°C) above the dew point.

Application Equipment

Heated Plural Component Airless (only)
Applicator training is required and spray equipment must be approved by ITW Futura Coatings Technical Service.

- 1:1 ratio capable of producing a minimum delivery rate of 1¼ gallons per minute at a tip pressure of 2500-3000 psi.
- Proportioner heaters and heated hose capable of maintaining material temperatures of 135-150°F (57-65°C) at the spray tip.
- Drum heaters capable of maintaining material temperatures of 75-90°F (24-32°C) during application
- 2:1 ratio transfer pumps minimum.
- Contact ITW Futura Coatings for specific information.

Clean Up

Consult ITW Futura Coatings "Plural Component Equipment Guide" for specific information.

Cure Time

These times are based on a 30-50% RH. Excessive film thickness, cooler temperatures or inadequate ventilation will require longer cure times and could result in premature failure.

	Surface Temperature 50-69°F (10-21°C)	70-89°F (21-32°C)	90-110°F (32-43°C)
Surface dry	< 15 seconds	< 15 seconds	< 15 seconds
Hard Film	< 1 minute	< 1 minute	< 1 minute
Recoat (min)	1 minute	1 minute	1 minute
Recoat (max)	4 hours	4 hours	4 hours
Full cure	4 days	4 days	2 days

- Due to rapid cross-linking recoating must be done as soon as dry or within 4 hours maximum..

Safety Information

- Read the Material Safety Data Sheet (MSDS) and container labels for detailed health and safety information.
- Do not apply material in enclosed areas without adequate air exchange and ventilation.
- All application personnel must use fresh air respirators or fresh air hoods.
- Wear protective clothing, gloves and eye protection.
- Breathing fumes or contact with the skin may cause severe allergic reactions.
- **This product is intended for industrial use by properly trained professional applicators only.**

Storage Conditions

- Urethane coatings need to be protected from moisture contamination. Store drums and pails in a dry location at 60-90°F (16-32°C).
- Drums **must** be kept sealed at all times with a positive feed dry air, nitrogen blanket or desiccant cartridge system.
- Materials **must** be kept above 50°F (10°C).

ITW FUTURA COATINGS, 1685 GALT INDUSTRIAL BLVD., ST LOUIS, MO, (314) 733-1110