



TECHNICAL DATA

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FUTURA-THANE® 585 ALIPHATIC URETHANE

Product Description

A two component, high-solids, standard cure, aliphatic urethane elastomer which offers excellent performance properties for high build applications. May be applied over aromatic fast set or standard set coatings for improved gloss and color stability in weathering exposures.

Features

- Fast recoat times.
- High build – up to 100 mils DFT in multiple coats.
- Low VOC.
- Long Pot Life.
- Applied with standard airless equipment.
- Excellent abrasion resistance.
- Excellent UV stability, color retention and weathering characteristics.

Recommended Uses

Typically used for applications requiring a very tough and durable urethane elastomer with excellent color retention, UV stability, high build capabilities and fast recoat time.

Primers

Steel: Futura-Bond 610 HS

Concrete: Futura-Bond 415

Other: Contact ITW Futura for a recommended primer.

Typical Properties

Solids by Volume	66% ± 1
Volatile Organic Compounds	2.5 lb/gal (300 g/l)
Theoretical Coverage	1059 ft ² @ 1 mil (2.5 m ² @ 1 mm)
Recommend DFT (Do not exceed 25 mils per coat)	20 – 100 mils (0.5 – 2.5 mm)
Number of Coats	1 or more
Mix Ratio (by volume)	1”A” : 1”B”
Flash Point (PMCC)	41°F (5°C)
Shelf Life @ 60-90°F (16-32°C)	Part A: 9 months Part B: 1 year
Color	Standard: White, Light Gray Dark Gray

Specification Data

Elongation – ASTM D 412	190%
Tensile Strength ASTM D 412	1950 ± 50 psi
Hardness – ASTM D 2240	90 Shore “A”
Abrasion – ASTM C 501	CS-17 46 mg loss
	H-10 60 mg loss
Tear Strength ASTM D 624	200 pli
100 %Modulus ASTM D 412	1430 ± 30 psi
Low Temperature Flexibility – ASTM D 2156	-50°F (-46°C) Passes 90° bend

Ordering Information

Packaging:	2 gal & 10 gal kits
Shipping Weight:	12 lb/gal (5.4 kg/gal)

APPLICATION INFORMATION FUTURA-THANE 585

Surface Preparation

Remove all oil, grease or other contaminants from the surface to be coated in accordance with SSPC-SP 1.

Steel: Apply over clean, dry properly applied FUTURA-BOND 610 HS or other recommended primer.

Concrete: Apply over clean, dry properly applied FUTURA-BOND 415 or other recommended primer. Note: Rough concrete may require surfacing with FUTURA-BOND 320 GEL prior to the application of the FUTURA-BOND 415.

Other: Contact ITW Futura Coatings for specific recommendations.

Mixing

Power mix part "B" component separately, then combine at a ratio of 1 "A" to 1 "B" by volume and power mix to a smooth consistency.

Thinning

Normally not required, maybe thinned up to 10% by volume with Xylol if needed.

Pot Life

Material Temperature	Time
55°F (13°C)	3 hours
75°F (24°C)	2 hours
95°F (35°C)	1 hour

Application Conditions

	Normal	Minimum	Maximum
Material*	75-90°F (24-32°C)	50°F (10°C)	95°F (35°C)
Surface	75-90°F (24-32°C)	50°F (10°C)	120°F (49°C)
Ambient	75-90°F (24-32°C)	50°F (10°C)	120°F (49°C)
Humidity	30-50%	0%	85%

*Precondition to 75-90°F (24-32°C) before using.
Surface temperature must be 5°F (3°C) above the dew point.

Application Equipment

Airless:

Pump Ratio	30:1 min	Tip Size	.020-.030"
Material Hose*	3/8" ID min 100' max	Tip Pressure psi	2600-3000

Roller: Use a short to medium nap with phenolic core.

Brush: Use a high quality brush suitable for use with solvent based coatings.

Clean Up

Use MEK or a 1:1 blend of MEK and Toluol.

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.

	<u>Surface Temperature</u>		
	50-69°F (10-21°C)	70-89°F (21-32°C)	90-110°F (32-43°C)
Surface dry	6 hours	3 hours	2 hours
Hard Film	26 hours	18 hours	12 hours
Recoat (min)	3 hours	2 hours	1 hour
Recoat (max)	3 days	2 days	24 hours
Full cure	7 days	5 days	3½ days

- If the maximum recoat time has been exceeded by more than 24 hours' contact ITW Futura Coatings for recommended recoat procedures.

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 respirators rated for organic vapors, or in confined spaces wear 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 contains flammable solvents! Keep away from all sparks, flames and hot surfaces.
- **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 55-80°F (11-27°C).
- Materials **must** be kept above 50°F (10°C).

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

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