



TECHNICAL DATA SHEET – STYROTHANE 5321

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PRODUCT DESCRIPTION

Fast cure, 100% solids, aromatic polyurethane coating. A "hard-coat" specifically designed to provide high impact damage resistance for expanded polystyrene (EPS), Styrofoam and PUF. Must be applied using a heated plural component airless pump.

FEATURES

- Fast cure and cycle times for increased production rates
- High gloss visual appeal for product enhancement
- Durability extends substrate life
- Impact Resistant Protection
- Protection against chemical attacks (gasoline, oil, solvents, etc.)
- Excellent waterproofing characteristics
- Resistant to freeze/thaw expansion contractions and thermal shock cycles.

RECOMMENDED USES

- High impact damage protection for Expanded Polystyrenes (EPS) and Styrofoam.
- Protection and enhanced aesthetic appeal for urethane foam and phenolic foam board stock.
- Protection and enhanced aesthetic appeal for wood surfaces.

TYPICAL PROPERTIES

SOLIDS BY VOLUME (ASTM D-1353)	99% ± 1
VOLATILE ORGANIC COMPOUNDS	0 lbs/gal (0 g/L)
THEORETICAL COVERAGE	1604 ft ² /gal @ 1 mil (3.8 m ² /gal @ 1.0mm)
RECOMMEND DFT	30-100 mils
NUMBER OF COATS DO NOT EXCEED 30 MILS DFT PER COAT	One or more
MIX RATIO (BY VOLUME)	1 "A" : 1 "B"
FLASH POINT – PMCC	>300°F (149°C)
VISCOSITY LV4/60 RPM A COMPONENT B COMPONENT	900 700
SHELF LIFE @ 65-80°F (18-27°C)	12 Months
COLOR	Neutral

SPECIFICATION DATA

TENSILE STRENGTH – ASTM D 412	2700 psi (18.5 mpa)
ELONGATION – ASTM D413	30 %
HARDNESS – ASTM D2240	71 Shore D
FLEXURAL MODULUS – ASTM D790	60,000±5000
DENSITY	65 lbs./ft ³ (1040 kg/m ³)

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AROMATIC URETHANE



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ORDERING INFORMATION

PACKAGING	110 gal kits
SHIPPING WEIGHT	11 lb/gal (5 kg/gal)

SURFACE PREPARATION

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

MIXING

Power mix "B" component a uniform consistency, "A" component does not require mixing.

DO NOT BATCH MIX.

THINNING: DO NOT THIN

POT LIFE

MATERIAL TEMPERATURE	TIME
70°F (21°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)	40°F (4°C)	120°F (49°C)
AMBIENT	75-90°F (24-32°C)	40°F (4°C)	120°F (49°C)
HUMIDITY	30-50%	0%	85%

* Materials must be preheated to 75-90°F (24-32°C) min 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 Polymers Sealants North America, Inc. 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 Polymers Sealants North America, Inc. for specific information.

CLEAN UP

Consult ITW Polymers Sealants North America, Inc. "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	5 minutes	2 minutes	1 minute
HARD FILM	20 minutes	10 minutes	6 minutes
RECOAT (MIN)	8 minutes	4 minutes	2 minutes
RECOAT (MAX)	15 hours	8 hours	1 hour
FULL CURE	3 days	48 hours	30 hours

- If the maximum recoat time has been exceeded by more than 24 hours consult ITW Polymers Sealants North America, Inc. for recommended recoat procedures.

SAFETY INFORMATION

- Read the Safety Data Sheet (SDS) 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 Polymers Sealants North America, Inc. warrants its products to be free from defects in material and workmanship. ITW Polymers Sealants North America, Inc.'s sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at ITW Polymers Sealants North America, Inc.'s option, to either replacement of products not conforming to this warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to ITW Polymers Sealants North America, Inc. in writing within five days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify ITW Polymers Sealants North America, Inc. of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

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