

# **GLOSS URETHANE**

# **TECHNICAL DATA SHEET**

(March 2025)

### **Product Description**

Supreme Xtreme Gloss is a premium two component, low VOC, low odor, high performance, water-based, water reducible, non-yellowing, aliphatic polyester urethane coating. Supreme Xtreme Gloss is a high gloss coating with excellent UV, chemical and abrasion resistance. The Gloss is a flexible urethane used for interior and exterior applications.

- High Gloss Clear & Colors
- Low VOCs Less than 30 g/l
- Upon mixing Parts A & B mixture has no free monomers

most surfaces without the need of a prime	r, including:
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Concrete	0	Tile & Grout
Terrazzo	0	Steel & Metal
Wood	0	VCT, Vinyl Sheeting & LVT
Fiberglass	0	Previously Painted Surfaces

# **Recommended Markets for Interior & Exterior Use:**

Airports / Transportation Amusement / Theme Parks Anti-Graffiti Systems Auto Dealerships Chemical & Petrochemical **Commercial Buildings** 

Education Food & Beverage Industry Healthcare / Pharmaceutical Hospitality Suitable for use in USDA **Inspected Facilities** 

Industrial Equipment Marine Industry Power Plants Pulp & Paper Railcar / Transport Vehicle Restaurant / Food Service

Storage Tanks **Transmission Pipelines** Warehouse / Manufacturing Waste Water / Municipal

#### **Additional Information**

For additional literature and information, including, marketing literature, pictures, training tools, ROIs and videos, contact Jim Beedie at 630-643-0143 or jimbeedie@aol.com.

**Performance Characteristics** 

# **Product Characteristics**

<u>Finish:</u>	Up to 95 Gloss (60° Angle)	Substrate Tested:	Steel
<u>Color:</u>	Clear & Colors (see color card)	Surface Preparation:	Wash with water-based
Weight Solids (Clear):	55% before reduced		biodegradable neutral cleaner
Weight Solids (Color):	Range of 53-59% (note 1)	Application:	Direct to Surface (no primer)
<b>Volume Solids</b> (Clear):	48% ±3%	<b>Tensile Adhesion:</b>	2,473-2,609 psi
<u>Volume Solids</u> (Color):	Range of 58-65% (note 1)	(ASTM D4541)	
<u>VOCs</u> (Clear):	11 g/l	Abrasion Resistance:	10-20 mg loss
<u>VOCs</u> (Color):	Range of 15-25 g/l (note 2)	(ASTM D4060)	
Free Isocyanate (HDI) GCMS:	< 0.036%	Condensing Humidity 1000 Hours:	Rusting: None
<b>Recommended Spreading Rate I</b>	<u>Per Coat:</u>	(ASTM D2247)	Blistering: None
<ul> <li>Vertical Surfaces</li> </ul>	Wet mils: 3.0 – 5.0	Impact Resistance:	160 in-lbs. (direct & in-direct)
	Dry mils: 2.0 – 3.25	(ASTM D2794)	
<ul> <li>Horizontal Surfaces</li> </ul>	Wet mils: 3.0 – 6.0	<u>Flexibility – Conical Bend:</u>	% Elongation: >32%
	Dry mils: 2.0 – 3.0	(ASTM D522)	Resistance to Cracking: <1/8" diameter
Actual Spread Rate:	200 - 400 sq. ft. per gallon	Pencil Hardness:	Scratch: H
Application Viscosity:	65-75 KU catalyzed & reduced	(ASTM D3363)	Gouge: 4H

Drying Schedule at 75° F:		<u>MEK Double Rubs</u>	1,000+
• To Touch:	To Touch: 6-8 Hours (Note 3) (Inter		
• To Handle: 8-10 Hours		Salt Fog 1,000 Hours:	Rusting: 10 (None)
• To Walk On:	10-12 Hours	(ASTM B117)	Scribe Undercutting: <0.5 mm
• Full Cure:	2 Days	Water Vapor Transmission:	2.43 perms
Pot Life at 75° F:	1 <sup>1</sup> / <sub>2</sub> Hours (90 minutes)	(ASTM E96)	
Sweat-In/Induction Time:	2 Minutes	<u>QUV 1,000 Hours:</u>	Passed SSPC Paint 36 Standard of:
Shelf Life:	12 Months @ 75° F	(ASTM D4587)	
<u>Flashpoint:</u>	> 185 ° F	Color Change:	Less than 2.0 Delta E Change
Recoat Times at 75° F:	Within 24 hours lightly abrade with 160 mesh screen. After 24 hours, sand with 120 mesh screen.	<ul> <li>Gloss Change: <u>Flame</u></li> <li><u>Retardant:</u> (ASTM 84)</li> </ul>	Less than 30° Gloss Change 15 – Class 1
Note 1: Depends on the color		Smoke Retardant:	5 – Class 1
Note 2: Excludes the colorant and depends on the color		(ASTM 98)	
Note 3: By using SX's Accelerator dry times can be reduced by half or more, depending on interior or exterior application and temperature		<u>Static Dissipative:</u>	Coatings are insulative – insulate electricity won't get better or worse, like rubber over wires.
	Recommended Systems for S	Supreme Xtreme Gloss Urethan	e

Vertical Structure:	1 coat of Gloss at $3.0 - 5.0$ mils WFT – Depending on porosity or profile of structure a second coat may be required.
Anti-Graffiti System:	1 coat of Gloss Pigmented followed by 1 coat of Gloss Clear. Alternative System is 2 coats of Gloss Clear.
Horizontal Surfaces:	1 coat of Gloss at 3.0 – 5.0 mils WFT – Depending on porosity and profile a second coat may be required.
Concrete:	1 coat of Gloss Pigmented or 1 coat of Gloss Clear. Alternative System is 2 coats of Gloss Clear.
Rough/ Uneven Concrete:	1 coat of Hi-Build (100% Solids) Epoxy followed by 1 coat of Gloss Clear or Pigmented.
New Wood:	1 coat of wood sealer then lightly sand followed by 1 coat of Gloss Clear. Alternative System is 2 coats of Gloss Clear.
Finished Wood:	Sand first then 1 or 2 coats of the Gloss Clear depending on desired appearance.
Steel:	1 coat of Gloss Clear or Pigmented. For extra corrosion protection, first apply 1 coat of an Epoxy Primer.
Galvanized:	1 coat of Gloss Clear or Pigmented.
Aluminum:	1 coat of Gloss Clear or Pigmented.
Inorganic Zinc Primers:	1 coat of Gloss Clear or Pigmented.
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The product can be applied direct to most surfaces. If applying over a solvent-borne primer, allow the primer to adequately cure in order for all solvents to evaporate according to manufacturer recommendations for recoat times for water-based urethanes. <u>Recoat Note</u>: When applying multiple coats of Supreme Xtreme Gloss, lightly abrade between coats using a 160-mesh screen within 24 hours. After 24 hours, sand between coats with a 120-mesh screen. Abrading and sanding is done to ensure successful adhesion between coats.

# **Application / Storage Conditions**

Conditions	Material	Surface / Ambient	Humidity	Pot Life / Dry Time	Product Storage
Normal	65° – 85°F	65° – 85°F	35-65%	None	75° F
Minimum	40° F	40° F	0%	These temps increase dry to touch and full cure times	40° F
Maximum	85° F	100° F	90%	These temps decrease working pot life	90° F
Do not apply the products when the substrate temperature is less than 5° F above the dew point.					

#### **Equipment**

Airless Spray: Unit: 2,000 – 2,400 psi Tip: 0.015 – 0.017

Hose: 1/4" or 3/8" Note: Do not use over 50 ft. hose Air-Assist Sprayer: Unit: 500 – 600 psi Tip: 0.015 – 0.017

**Tip Pressure:** As needed for proper atomization Conventional: DeVilbiss pressure pot with  $\pm$  GA 503 gun and FF needle assembly with 777 air cap.

Roller: Vertical surfaces use ¼" woven nap, phenolic core. Horizontal surfaces use 3/8" woven nap, phenolic core.

Brush: Nylon polyester blend

#### **Mixing Instructions**

**DO NOT SHAKE.** Separately stir each component thoroughly and then mix the premeasured Part B with the Part A. Mix combined Parts A & B thoroughly by hand or slow speed drill to ensure they are blended together, but avoid incorporating air during mixing. DO NOT MIX THE PRODUCT WITH A HIGH SPEED MIXER. Allow a 2 minute "induction time" for the mixture of Parts A & B. After the 2 minutes, the mixture of Parts A & B should be poured into a larger container for water reduction and to maximize pot life.

Reduce the combined mixture of Parts A & B by slowly adding Clean Tap Water at 2% to 15% depending on application method and surface. Reduce less for vertical surfaces, high humidity and more porous substrates. Reduce more for horizontal surfaces, low humidity and smooth substrates. Do not mix more than 2 gallons of the Gloss at a time in a 5-gallon container because the product is mass sensitive; increasing mass will reduce pot life.

To commence applying the product, once properly mixed per above instructions, the product should be poured off (increasing surface area) into a roller pan or other suitable containers in order to maintain the 90-minute pot life. If spraying the product from 5-gallon containers the pot life will be reduced to 20 minutes; therefore it must be sprayed within 20 minutes. Do not mix product towards the end of or past its pot life with freshly catalyzed material; discard unused product at the end of pot life. Do not reseal containers once product is catalyzed. Clean up with Acetone or Xylene.

#### **Surface Preparation**

- Steel: Remove all loose rust, dirt, grease or other contaminants per SSPC-SP1, SSPC-SP2 and SSPC-SP3 (e.g., low or high pressure with cleaner).
- Aluminum: Remove all oil, grease or soap film with a neutral biodegradable detergent or emulsion cleaner.
- **Galvanized Metal:** Remove all oil, grease or soap film with a neutral biodegradable detergent or emulsion detergent.
- **Concrete** / **Masonry** / **Concrete Blocks:** Clean masonry substrates with neutral biodegradable detergent or emulsion cleaner to remove laitance using low or high pressure washer. For high build systems, use Acrylic/Epoxy Primer for first coat (Note: Due to the vast differences in concrete substrates consult your sales representative for the proper coating system specifications).
- **Wood:** Sand new wood to remove any surface contaminant and to lower grain. Previously finished wood should be sanded to provide good adhesion. Test patches are recommended.
- **Previously Painted Surfaces:** Properly clean the surface of all dust, dirt, grease and foreign matter. Apply a test patch of the Gloss to ensure adhesion of the Gloss to the previously painted surface and also to ensure there will not be any delamination of the previously painted coating from the substrate.
- **Note:** In order to ensure optimum performance, remove the previous coating to bare substrate and then apply the proper SX coating system as specified by your sales representative.

Anti-Graffiti System: Follow appropriate surface preparation as noted above. For optimum performance use two coats of the Gloss Urethane.

THIS PRODUCT IS TO BE USED BY THOSE KNOWLEDGEABLE ABOUT PROPER APPLICATION METHODS. THIS PRODUCT IS FOR INDUSTRIAL USE

ONLY. Read each component's Safety Data Sheet (SDS) before use. Mixed materials may have the hazards of each individual component. Safety precautions must be strictly followed during storage, handling and use.

The seller warrants that this product conforms to label descriptions and is fit for purposes for which such goods are used. Since the use of this product is by others and additional factors affecting product performance are beyond the manufacturer's control, the manufacturer, does not guarantee the results obtained. SHOULD THIS PRODUCT FAIL TO MEET ITS SPECIFICATION MANUFACTURER WILL REPLACE THE PRODUCT OR, AT ITS OPTION, REFUND THE PURCHASE PRICE. THIS IS THE SOLE AND EXCLUSIVE REMEDY FOR ANY FAILURE OF THIS PRODUCT TO PERFORM AS WARRANTED AND SHALL ALSO CONSTITUTE LIQUIDATED DAMAGES IN CASE OF LOSS. UNDER NO CIRCUMSTANCES SHALL THE BUYER BE ENTITLED TO ANY OTHER REMEDY. REMEDIES FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE SPECIFICALLY EXCLUDED. The seller does not authorize any person to assume any other liability in connection with the sale for use of this product unless specifically authorized by the manufacturer.