

**DESCRIPTION**

A two-component, premium quality polyurethane topcoat, ideal for applications requiring durability, great appearance, corrosion and chemical resistance, and a high gloss finish. Excellent for use on heavy equipment, exterior storage tanks, trucks and trailers, farm implements, and oilfield equipment. Lead-free, low VOC.

For best results use the complete NexShield coating system.

**FEATURES**

NexShield HS is known for its ease of application due to unique flow characteristics, which creates an exceptional finish, in both appearance and strength.

- Ultra high gloss
- Superior colour retention
- High sag
- Excellent flexibility and durability
- Superior resistance to solvents and chemicals
- Low VOC & 100% lead free

**QUICK REFERENCE**

Mix Ratio	<b>4:1</b> (Resin to Catalyst)
Catalyst	<b>80500C</b> NexShield HS Catalyst
Recommended Thickness	<b>2.0-3.0 mils</b> (50-75 microns)
Theoretical Coverage	<b>898 ft<sup>2</sup>/usg @ 1.0 mil DFT</b> (22.0 m <sup>2</sup> /L @ 25 microns DFT)
Accelerator	<b>Q500</b> NexShield Accelerator
Thinner / Clean-up	<b>Q650</b> Universal Reducer

**PRODUCT DATA**

Type	Aliphatic Polyurethane
Gloss	High Gloss
Colour	Available in a full range of colors
VOC (mixed)	320g/L
Weight Solids (mixed)	68.0 ± 3.0%
Volume Solids (mixed)	56.0 ± 2.0%
Viscosity (mixed)	65-70 KU
Flash Point	22°C (71.6°F)
Sag Resistance	12 mils wet
Shelf Life	1 year after shipping

These technical specifications are based on results from product 501NX-White. All physical and chemical resistance tests conducted after 1 week cure time at 77°F (25°C) on properly cleaned substrate.

Last updated May 2013

**APPLICATION GUIDE**

Surface	Primed
Pot Life	8 hours @ 24°C (75°F)
<i>Dry time at 77°F (25°C) 50% relative humidity</i>	
Cure times without accelerator	
To Touch	1-2 hours
Tack Free	6 hours
To Recoat	>4 hours < 72 hours
Hard	24 hours
<i>Cure times with 0.25 fl oz/gal Q500 will be less.</i>	

**PERFORMANCE**

Flexibility	<1/8" mandrel
Abrasion	40mg weight loss (1000 cycles CS17 wheel)
Impact	120 in lbs direct 100 in lbs in reverse
Hardness	H-2H

**APPLICATION EQUIPMENT**

Conventional Air Spray	Reduce up to 10% with Q650 if required
Air Assisted Airless	Reduce up to 10% with Q650 if required
Airless	Reduce up to 10% with Q650 if required
Electrostatic Spray	Some adjustments for polarity may be necessary to maximum of 2 mohms
Brush & Roll	Recommended only with Touch Up Retarder Q750

**SURFACE PREPARATION**

All surfaces must be clean and free from dirt, oils, rust, flaking paint, and other contaminants. Ensure a sandblast quality of SSPC-SP6 (NACE 3) commercial blast or better and prime with a compatible epoxy primer prior to application (such as FerraPrime 105FP). Proper surface preparation will enhance the performance of the coating system.

Document №. 500NX\_TDS



**APPLICATION INSTRUCTIONS**

**THINNING:** Thinning is not necessary, but may facilitate flow depending on application equipment, use up to 10% total by volume. Only use the specified thinners approved by the manufacturer. Be aware that additional reduction (solvent) will increase the VOC levels of the mixed coating. Always know VOC laws for coating application in your area and follow regulated restrictions.

**APPLICATION:** Mix thoroughly before use, A to B ratio is 4:1. Combine 1 gallon "A" NexShield HS Urethane Topcoat with 1 quart "B" 80500C and mix well. Apply when surface and air temperature are between 35°F-100°F (7°C-38°C) Ensure surface temperature is at least 5°F (3°C) above the dewpoint.

**DRYING TIME:** See application data for typical dry times. Low temperature, high humidity, poor ventilation and thick films will slow drying. Q500 Accelerator may be added up to 0.25 fl oz per mixed gallon of NexShield to increase cure rate. Using accelerator will alter cure times.

**CLEAN UP:** Flush mixed material from pot and lines immediately after use. Clean up paint tools or spills immediately with recommended thinner, carefully observing cautions on paint and thinner labels. Dried paint may be removed by scraping.

**SAFETY & STORAGE**

For industrial use only by professional applicators. Always wear appropriate safety equipment and observe proper handling techniques.

Refer to *Material Safety Data Sheet* for proper health and safety information. Store in cool, dry, and secure location. Consult your Niskoat representative for more information.

**GENERAL PURPOSE SYSTEM SPECIFICATIONS**

<b>Sandblast</b>	SSPC-SP6 (NACE 3) Commercial Blast or SSPC-SP5 (NACE 1) Near-white Blast	
		<b>105FP</b>
<b>Prime</b>	FerraPrime Epoxy Primer	
	<b>2.5 - 4.0 mils DFT (65-100 microns)</b>	
		<b>5xxNX - Colour</b>
<b>Topcoat</b>	NexShield HS Urethane Topcoat	
	<b>2.0 - 3.0 mils DFT (50-75 microns)</b>	
		<b>500NX - Clear</b>
<b>Clear Coat (optional)</b>	NexShield HS Urethane Topcoat	
	<b>1.0 - 2.0 mils DFT (25-50 microns)</b>	
<b>TOTAL SYSTEM</b>	<b>5.5 - 9.0 mils DFT (140-225 microns)</b>	
<b>Topcoat Accelerator</b>		<b>Q500</b>
	NexShield Accelerator	
<b>Thinner</b>		<b>Q650</b>
	Universal Reducer	



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*IMPORTANT – The information contained in this data sheet pertains to material currently offered and represents the results of Laboratory evaluation and is intended as a guide. Since the customer's application requirements are not under our control, Nisku Industrial Coatings Ltd. and Niskoat Ltd. cannot make any warranties or guarantees for the results obtained.*