

XPC Stage 1



Selection & Specification Data

Generic Type	Cycloaliphatic Amine Epoxy
Description	Highly chemical resistant epoxy coating with exceptionally versatile uses in all industrial markets. Self-priming and suitable for application over most existing coatings, and tightly adherent to rust. XPC serves as a stand alone system for a variety of chemical environments. XPC is also designed for various immersion conditions
Features	<ul style="list-style-type: none">■ Excellent chemical resistance■ Surface tolerant characteristics■ Conventional and low-temperature versions■ Self-priming and primer/finish capabilities■ Very good abrasion resistance■ VOC compliant to current AIM regulations■ Tested for Nuclear Service Level 1■ Suitable for use in USDA inspected facilities
Color	Refer to XPC Color Guide. Certain colors may require multiple coats for hiding. Note: The low temperature formulation will cause most colors to yellow or discolor more than normal in a short period of time. (Epoxies lose gloss, discolor and chalk in sunlight exposure.)
Finish	Gloss
Primers	Self-priming. May be applied over inorganic zinc primers and other tightly adhering coatings. A mist coat may be required to minimize bubbling over inorganic zinc primers.
Topcoats	Acrylics, Epoxies, Polyurethanes
Dry Film Thickness	4.0-6.0 mils (100-150 microns) per coat 6.0-8.0 mils (150-200 microns) over light rust and for uniform gloss over inorganic zincs. Don't exceed 10 mils (250 microns) in a single coat. Excessive film thickness over inorganic zincs may increase damage during shipping or erection.
Solids Content	By volume 75% ±2%
Theoretical Coverage Rate	1203 mil ft ² (30.0 m ² /l at 25 microns) 241 ft ² at 5 mils (6.0 m ² /l at 125 microns)
VOC Values	As supplied: 1.7 lbs/gal (214 g/l) Thinned: w/ #2 7 oz/gal = 2.0 lbs/gal (250 g/l) 13 oz/gal = 2.2 lbs/gal (271 g/l) Thinned w/#33 7 oz/gal = 2.0 lbs/gal (250 g/l) 16 oz/gal = 2.3 lbs/gal (285 g/l) *Use thinner #76 up to 8 oz/gal where non-photochemically reactive solvents are required
Dry Temperature Resistance	Continuous: 250°F (121°C) Non-Continuous: 300°F (149°C) Discoloration and loss of gloss is observed above 200°F (93°C)
Limitations	Do not apply over latex coatings. XPC should not be used for immersion and should only be used as a primer or intermediate coat. Discoloration may be objectionable if used as a topcoat.

To the best of our knowledge the technical data contained in this document herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Skyline Steel to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Skyline Steel quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. **NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SKYLINE STEEL, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

Substrates & Surface Preparation

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.	
Steel	Immersion:	SSPC-SP10
	Non-immersion:	SSPC-SP6
	1.5-3.0 mils (38-75 microns)	
	SSPC-SP2 or SP3 are suitable cleaning methods for mild environments	
Galvanized Steel	Prime with specific XPC primers as recommended by your Sheeting Solutions Sales Representative. Refer to the specific primer's Product Data Sheet for substrate preparation requirements.	
Previously Painted Surfaces	Lightly sand or abrade to roughen surface and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scribe" adhesion test.	

Performance Data

Test Method	System	Results	Report #
ASTM D4060 Abrasion	Blasted Steel 1 ct. Primer 1 ct. XPC	85 mg. less after 1000 cycles, CS17 wheel, 1000 gm. load	02730
ASTM D3359 Adhesion	Blasted Steel 1 ct. XPC	5A	02411
ASTM B117 Salt Fog	Blasted Steel 1 ct. Primer 1 ct. XPC	No Effect on plane, rust in scribe; less than 1/16" undercutting after 2000 hours	02594
ASTM B117 Salt Fog	Blasted Steel 1 ct. XPC	No effect on plane, no rust in scribe; undercutting after 4000 hours	02594
ASTM D1735 Water Fog	Blasted Steel 1 ct. Primer 1 ct. XPC	No blistering, rustling or delamination after 2800 hours	02411
ASTM D3363 Pencil Hardness	Blasted Steel 2 cts. XPC	Greater than 8H	02775
ASTM D2466 Scrub Resistance	Blasted Steel 1 ct. XPC	93% gloss retained	03142
ASTM E84 Surface Burning Characteristics	Blasted Steel 1 ct. XPC	Rated Class "A" Flame Spread 7.0, Smoke Spread 7.0	03110
ASTM D1653 Water Vapor Transmission	Blasted Steel 2 cts. XPC	5.4 gm/24 hr-m ²	03333
ASTM D1308 Splash & Spillage	Blasted Steel 2 cts. XPC	No effect to coated surface	02533
Thermoshock	Blasted Steel 1 ct. XPC	No cracking or flaking	08682

Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray Application (General) This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, De Vilbiss, and Graco.

Conventional Spray Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .070" I.D. fluid tip and appropriate air cap.

Airless Spray

Pump Ratio:	30:1 (min.)*
GPM Output:	3.0 (min.)
Material Hose:	3/8" I.D. (min.)
Tip Size:	.017"-.021"
Output PSI:	2100-2300
Filter Size:	60 mesh

*Teflon packings are recommended and available from the pump manufacturer.

Brush & Roller (General) Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or re-rolling. For best results, tie-in within 10 minutes at 75°F (24°C).

Brush Use a medium bristle brush.

Roller Use a short-nap synthetic roller cover with phenolic core.

Mixing & Thinning

Mixing Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.

Ratio 1:1 Ratio (A to B)

Thinning*

Spray:	Up to 13 oz/gal (10%) w/ #2
Brush:	Up to 16 oz/gal (12%) w/ #33
Roller:	Up to 16 oz/gal (12%) w/ #33
Thinner:	#33 can be used for spray in hot/windy conditions. Use of thinners other than those supplied or recommended by Skyline Steel may adversely affect product performance and void product warranty, whether expressed or implied. *See VOC values for thinning limits.

Pot Life 3 Hours at 75°F (24°C)
Pot life ends when coating loses body and begins to sag. Pot life times will be less at higher temperatures.

Cleanup & Safety

Cleanup User thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

Safety Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective cream on face, hands and all exposed areas.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	60°-85°F (16°-29°C)	60°-85°F (16°-29°C)	60°-90°F (16°-32°C)	0-80%
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	125°F (52°C)	110°F (43°C)	80%

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

Curing Schedule

890 (Based on 4-8 mils, 100-200 microns dry film thickness.)

Surface Temperature & 50% Relative Humidity	Dry to Recoat	Dry to Topcoat w/ Other Finishes	Final Cure (General)	Final Cure (Immersion)
50°F (10°C)	12 Hours	24 Hours	3 Days	N/R
60°F (16°C)	8 Hours	16 Hours	2 Days	10 Days
75°F (24°C)	4 Hours	8 Hours	1 Day	5 Days
90°F (32°C)	2 Hours	4 Hours	16 Hours	3 Days

890 (Based on 4-8 mils, 100-200 microns dry film thickness.)

Surface Temperature & 50% Relative Humidity	Dry to Touch	Dry to Handle	Dry to Recoat & Topcoat w/ Others	Final Cure General Service
35°F (2°C)	5 Hours	18 Hours	20 Hours	7 Days
40°F (4°C)	4.5 Hours	15.5 Hours	16 Hours	5 Days
50°F (10°C)	3.5 Hours	6.5 Hours	12 Hours	3 Days
60°F (16°C)	2 Hours	5 Hours	8 Hours	2 Days
75°F (24°C)	1.5 Hours	2 Hours	4 Hours	24 Hours
90°F (32°C)	1 Hour	1.5 Hours	2 Hours	16 Hours

Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. During high humidity conditions, it is recommended that the application be done while temperatures are increasing. **Maximum recoat/topcoat times are 30 days for epoxies and 90 days for polyurethanes at 75°F (24°C).** If the maximum recoat times have been exceeded, the surface must be abraded by sweep blasting or sanding prior to the application of additional coats.

Packing, Handling & Storage

Shipping Weight (Approximate)	2 Gallon Kit 29 lbs (13kg)	10 Gallon Kit 145 lbs (66kg)
Flash Point (Setflash)	89°F (32°C) for Part A 73°F (23°C) for Part B	
Storage Temp. & Humidity	40°F - 110°F (4°C - 43°C) Store indoors. 0-100% Relative Humidity	
Shelf Life:	Part A: Min. 36 months at 75°F (24°C) Part B: Min. 15 months at 75°F (24°C)	* Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.