

Dual Cure 178

Semi-Gloss Polyaspartic
Finish Coat or Primer



U.S. Patents:
6,833,424 & 7,169,876

Description:

Dual Cure 178 is a patented high performance Polyaspartic, engineered to provide excellent exterior durability, adhesion and flexibility. This semi gloss protective coating may be applied to blasted steel as a DTM system that meets ISO 12944 (C2-C3). Dual Cure 178 may be used as a fast curing primer that can be topcoated with itself or other DualCure Topcoats. DualCure 178 is very chemical and abrasion resistant coating, as well as having good exterior durability and flexibility.

Advantages:

- Good Color and Gloss Retention
- Superior Scratch Resistance
- Superior Adhesion
- Flexibility
- 1-Hr Dry Time
- No Heat Cure
- Good Corrosion Resistance
- High Abrasion Resistance

Uses:

- Heavy-Duty Machinery
- Oil and Gas
- Containers
- Implements
- Exterior Steel
- Vehicles
- Marine

Surface Preparation:

New or Unfinished Surfaces:

Ferrous Metal: For use as a **“Direct to Metal”** application **to abrasive blasted surface is recommended.**

“Commercial Blast Cleaning” (SSPC-SP6) is recommended as the minimum for blast cleaning. Proper blast media and blasting equipment shall be used to produce a minimum profile depth of 1.5 mils minimum. Do not reuse abrasive media. Remove blasting dust and grit from surfaces before painting. Blasted surfaces should be coated within 8 hours after blasting or before rusting or other contamination of the surface occurs.

If blasting is not possible, a primer is required along with chemical cleaning or pretreatment.

Suitable Primers: SteelKote 825, SteelKote 850, SteelKote 900

Galvanized Metal: Clean all contamination by scrubbing with a cleaning soap solution. Abrasive Blast and apply DualCure 306 Primer.

Aluminum or Stainless Steel: For best performance, application to abrasive blasted surface is recommended or etch with a phosphoric acid pretreatment solution is recommended for maximum adhesion. Clean all contamination by scrubbing with a cleaning soap solution. Prime with Steelkote 950 Multi Surface Epoxy Primer.

Mixing Instructions:

Thoroughly mix product, preferably using a mechanical mixing device. The temperature of the mixed product should be at least 45°F during application. Mix 2 parts of DualCure 178 Part A with 1 Part of ACT-902 Activator.

Material Properties

Gloss Level	40° Satin Gloss
Density	11.58 lbs/gal (1.37kg/ltr) mixed
Volume Solids	56.7% (mixed)
VOC	3.3 lbs./gal (395 grams/ltr) mixed
Dry Film Thickness	2.0 - 4.0 mils
Colors Available	Full Color Spectrum Available
Pot Life (68°F/20°C)	25 minutes mixed
Theoretical Coverage	454 ft ² / gal @ 2.0 mils dry film thickness
Practical Coverage	As a guideline for airless spraying on large dimensions: 70% of theoretical coverage. For small dimensions: 50%

Application Instructions

Spray Method	Airless	Air Assisted Airless	Air Spray/MVLP/HVLP
Thinner	N/A	N/A	MAK
Quantity	N/A	N/A	0-10%
Nozzle or Tip Size	0.011-0.013	0.012-0.015	1.0-1.5
Fluid Pressure	2000 - 3000 PSI	1200 - 1800 PSI	8-16 PSI
Air Pressure	N/A	15-25 PSI	20-30 PSI
Dry Film Thickness	2.0 - 4.0 Mills	2.0 - 4.0 Mills	2.0 - 4.0 Mills

Performance Characteristics

Accelerated Weathering: ISO 11507 / ASTM G154 ISO 2813 / ASTM D523	2000 hours gloss retention @ 60° > 50%
Florida Black Box Exposure	N/A
Impact (Direct-Reverse) ASTM D-2794	160 in lbs
Chemical Resistance	100 Double MEK Rubs
Flexibility: ISO 1519 / ASTM D522	Cylindrical Mandrel 10mm ISO 1520 Cupping 5-7 mm
Abrasion Resistance: ASTM D4060	CS-17 / 1kg 1000 cycles: 50 mg loss
Salt Spray ASTM B-117	Direct to Metal Blasted 1500 hours

Dry Times: 70°F @ 3-5 mils DFT

To Touch:	30 Minutes
To Handle:	1-hour
To Re-Coat:	1-hour minimum / 12 hours maximum @ 2.5 mils dry
Force Cure:	Do not force cure, heat will not help product cure faster

Health & Environmental:

In accordance with OSHA regulations on hazardous materials, harmful and irritating if in contact with skin, eyes and by inhalation. Observe safety information from SDS sheets. Always wear proper protective suits, gloves and eye protection. In case of eye contact, immediately wash with large amounts of water and contact a medical expert. If spraying, always wear proper NIOSH approved respirators. Fresh air fed respirators are preferred. Do not eat, drink or smoke during application. Discharge, treatment or disposal is subject to federal, state, commonwealth, provincial and local laws. Since empty containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind or weld on or near this container.

Clean Up Instructions:

Cleaning tools: Clean immediately after application using MEK.

Warranty / Disclaimer:

The technical data and other printed information furnished are true and accurate to the best of our knowledge. The products are warranted pursuant to acceptance of limited warranty. A copy of which can be obtained from Baril Coatings, which is the exclusive warranty with respect to the sale of this product. The modification of any component or uses not outlined in this bulletin nullifies the warranty unless advance written confirmation is obtained from Baril Coatings. No other warranties expressed or implied shall apply. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, shall be to supply replacement materials as set forth in the limited warranty.