

DualCure 183

Gloss DTM Aliphatic Polyaspartic



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

Description:

Dual Cure 183 is a patented high performance Direct to Metal coating system engineered to provide excellent exterior durability, adhesion and flexibility. This Gloss protective coating may be applied to blasted, primed or e-coated surfaces. Dual Cure 183 is a fast curing coating system and is designed to enhance productivity without the need for heat for drying. Additionally, this zinc-fortified formulation provides moderate corrosion resistance and protection in ISO 12944-1 (C3 High). It is highly resistant to fresh and salt water, most chemicals, fumes and spills of mild acids and alkalies.

Advantages:

- Excellent Color and Gloss Retention
- Attractive Gloss Finish
- Superior Adhesion
- Flexibility
- 1-Hr Dry Time
- Single Coat application
- Good Corrosion Resistance
- High Abrasion Resistance

Uses:

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

Material Properties

Gloss Level	82 units at 60 degrees
Density	11.65 lbs/gal (1.39 kg/ltr) mixed
Volume Solids	60% (mixed)
VOC	2.4 lbs/gal (287 g/l) mixed
Dry Film Thickness	3.0 - 6.0 mils
Colors Available	Full Color Spectrum Available
Pot Life (68°F/20°C)	20 minutes mixed
Theoretical Coverage	176 ft ² / gal @ 6.0 mils dry film thickness
Practical Coverage	As a guideline for airless spraying on large dimensions: 70% of theoretical coverage. For small dimensions: 50%

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 2 mils (50 microns) 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. I

Suitable Primers:

ISO 12944 C5

1 ct. DualCure 306 Zinc Rich at 4 mils DFT

1 ct. DualCure 183 at 7 mils DFT

*DualCure 183 is also compatible with the following Baril epoxy primers. SteelKote 825, SteelKote 853, SteelKote 900, DualCure 306

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 853 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 3 Parts of DualCure 183 Part A with 1 Part of ACT-097Activator.

Application Instructions

Spray Method	Airless	Air Assisted Airless	Air Spray / HVLP
Thinner	N/A	N/A	MAK
Quantity	N/A	N/A	0-10%
Nozzle or Tip Size	0.011-0.013	0.011-0.015	1.0-1.5
Fluid Pressure	2000 - 3000 PSI	1000 - 2000 PSI	8-10 PSI
Air Pressure	N/A	50 PSI	45 PSI
Dry Film Thickness	3.0 - 6.0 Mils	3.0 - 6.0 Mils	3.0 - 6.0 Mils

Performance Characteristics

Accelerated Weathering: 2000 hours
ASTM D4587 gloss retention > 70%

Florida Black Box Exposure Pass 12 months minimal
gloss loss, over 85%
color retention

Impact (Direct) ASTM G-14 120 in lbs

Chemical Resistance 100 Double MEK Rubs

All Direct to Metal corrosion testing was completed on SSPC SP 6
blasted steel panels at a DFT of 6-9 mils

Corrosion Weathering ASTM D5894, 8 cycles Rating 10 per ASTM D714 for
blistering; Rating 10 per ASTM
D610

Salt Spray ASTM B-117 Direct to Blasted Metal
Passes 1000 Hours

Clean Up Instructions:

Cleaning tools: Clean immediately after application using MEK.

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.

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.