

# Dual Cure 174

High-Gloss  
Premium Aliphatic Polyaspartic Finish



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

## Description:

DualCure products are unique patented high performance finishes. Engineered to provide excellent exterior durability, flexibility and superior adhesion to blasted, primed or e-coated surfaces. This fast curing coating system is designed to provide superior performance and enhanced productivity without the need for heat for drying. DualCure 174 offers excellent long term protection in moderate to severe environments. Resistant to fresh water, salt water, most chemicals, fumes and spills of mild acids and alkalies. Abrasion and moisture resistant, DualCure finishes are our longest lasting most durable topcoats. This DualCure product is recommended for commercial, industrial and marine use on machinery, trailers, containers, implements, structures and vehicles. Great for applications where excellent color and gloss retention are expected and slick automotive like finishes are required.

## Advantages:

- Excellent Color and Gloss Retention
- High Gloss Finish
- Increased Productivity
- Flexibility
- 1-Hr Dry Time
- No Heat Cure
- Good Corrosion Resistance
- High Abrasion Resistance

## Uses:

- Heavy-Duty Machinery
- Trailers
- Containers
- Implements
- Exterior Steel
- Vehicles
- Marine

## Surface Preparation:

New or Unfinished Surfaces:

**Ferrous Metal:** Possibly suitable **“Direct to Metal”** application **to abrasive blasted surface.**

“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 829, DualCure 200, 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 1 Part of DualCure 174 Part A with 1 part of ACT-902 Activator.

## Material Properties

Gloss Level	95 units at 60°
Density	11.46 lbs/gal (1.37kg/ltr) mixed
Volume Solids	66% (mixed)
VOC	2.5 lbs/gal (303 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	521 ft <sup>2</sup> / 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 / HVLP
Thinner	N/A	N/A	MAK
Quantity	N/A	N/A	0-10%
Nozzle or Tip Size	0.011-0.013	0.011-0.013	1.0-1.5
Fluid Pressure	2000 - 3000 PSI	1000 - 1500 PSI	8-10 PSI
Air Pressure	N/A	50 PSI	45 PSI
Dry Film Thickness	2.0 - 4.0 MILS	2.0 - 4.0 MILS	2.0 - 4.0 MILS

## Performance Characteristics

Accelerated Weathering: ISO 11507 / ASTM G154 ISO 2813 / ASTM D523	1500 hours gloss retention @ 60° > 80%
Florida Black Box Exposure	Pass 48 months minimal gloss loss, over 60% color retention
Impact (Direct & Indirect) ASTM D-2794	160 in lbs
Chemical Resistance	200 Double MEK Rubs
Flexibility: ISO 1519 / ASTM D522	Cylindrical Mandrel 10mm ISO 1520 Cupping 5-7 mm
Abrasion Resistance: ASTM D4060	Taber CS-17 / 1kg 400 cycles: 150 mg loss
Salt Spray ASTM B-117	Direct to MetalBlasted 500 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.