

DIAMOND DF FLEET
COATING SYSTEMS

**2K Intermix Polyurethane
Single Stage 2K Topcoats**

DESCRIPTION: The Diamond Fleet 2K Intermix Polyurethane is a superior two component acrylic polyester urethane which exhibits exceptional urethane toughness, extended gloss and color retention, along with excellent chemical and abrasion resistance. This product is designed as a superior performance finish topcoat for OEM, Fleet, and industrial / automotive refinish applications.

PHYSICAL PROPERTIES: Mixed
 Weight Solids: 50%-65%
 Volume Solids: 40% to 55%
 Resin Type: Acrylic Urethane
 Gloss: 90 at 60°
 Theoretical Coverage: 680-870 square feet at 1.0 mil
 Weight per Gallon: 8.5-10.05 pounds.
 Blended Viscosity: #2 Zahn – 21-32 seconds at 77°F

SURFACE PREPARATION: Product requires a primer. Please reference primer product data sheet for Surface Preparation requirements.
 Recommended primer systems include Mult-E-Prime 565 Epoxy, SLX1402-01 MMP Urethane, Stratum® Ultra R/I Urethane, Hyperprime® 2K Ultra R/I Epoxy, or Stratum® Sandable Polyester Primer

ACTIVATION: Diamond Fleet 2K Intermix has four Urethane Activator options

Part B Options	IG-0267	IG-0268	IG-0299	IG-0272
Mix Ratio	3A: 1B	3A:1B	3A:1B	4A:1B
VOC range (lbs/gal)*	2.8-3.5	2.8-3.5	2.3-2.8	2.5-3.1
Set to Touch Time (IM-004)	40 Min	50 Min	35 Min	40 Min
Set to Touch Time (IM-005)	50 Min	60 Min	45 Min	55 Min
Set to Touch Time (IM-006)	60 Min	75 Min	50 Min	60 Min

BINDERS: There are three binder options for this system to customize dry times.
IM-004 Fast Binder
 Small Parts needing quick flash times
IM-005 Medium Binder
 Winter blend for cold weather on medium size equipment
IM-006 Slow Binder
 General use for most large equipment

Reduction: Use MAK, Butyl Acetate or N-4005 Zero VOC Reducer, C-11.

Pot Life: 1 - 2 hours minimum at 77°F. Two component mixing equipment should be set at a minimum 30-minute pot life alarms. As temperatures increase, the pot life will decrease.

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APPLICATION:	This urethane can be sprayed with all types of application equipment.
Airless:	For airless and air assisted airless application reduction will be necessary. Airless tip sizes should be in the .011 to .015 range. Adjust pressures accordingly for best atomization and transfer efficiencies. Air-assist airless pressures will be in the 800 to 1000-pound range for fluid and 30 to 50-pound range for atomizing air. <u>Airless high-pressure pumps will create turbulence in the paint, further reduction may be necessary to prevent solvent pop and/or air entrapment in the final paint film.</u>
Conventional Air:	For conventional air and electrostatic spray some reduction may be necessary. Use MAK or N-4005 Zero VOC reducer. Pressures are dependent upon the type of gun and fluid nozzle, but typically will be in the 45 to 60-pound range for proper atomization. Pot pressure between 10-25 psi.
In-Line Heat:	In-line heat may be utilized up to 100°F to improve application. Caution must be exercised to turn heat down during breaks and shutdowns to avoid setting up paint lines due to decrease in pot life.
Dry Film Thickness:	For best results, dry film thicknesses should be 1.0 to 2.0 mils over primer. This will require wet film thicknesses of 3.0 to 4.0 mils. Apply in two medium build coats.
DRY TIMES:	Diamond Fleet 2K Polyurethane will typically dry to tack free in 2-3 hours depending on binder/toner selection. Dry to Handle times are typically 5-6 hours between 70 – 75°F at 4 to 5 WFT. Diamond Fleet 2K Polyurethane can be recoated at tack free and up to 48 hours. After 48 hours Diamond Fleet 2K Polyurethane will need to be scuff sanded to ensure inter-coat adhesion. Force drying: 15 to 20 minutes at 160° to 180°F depending on metal thickness and mass. When recoating after force drying, scuff sanding may be required to ensure inter-coat adhesion.
CLEAN UP:	Use butyl acetate or ketones or exempt reducer to flush application lines and equipment. The pot life will be approximately 1 - 2 hours at 77°F. At higher temperatures, pot life will diminish.
PERFORMANCE:	Typical, tested on B-1000 0.032 CRS panels. Specific Test Results are available upon request.
Hardness:	ASTM D3363 - 3H-4H
Adhesion:	ASTM D3359 - 5B to recommended primers and direct to aluminum
Impact Resistance:	ASTM D2794 - 80-160 direct and 80-160 reverse for most colors
Weathering	SAE J2527 - 95%+ gloss retention at 1000 hours, 80%+ gloss retention at 2500 hours
SAFETY PRECAUTIONS:	Contains aliphatic polymeric isocyanate when blended. Avoid contact with skin. Vapor and spray mist harmful. Use proper respiratory protection, including positive air supplied respirators. (Fresh Air Hoods) Refer to SDS for specific information. All information subject to change without notice

*VOC varies - depending on color, composition and catalyst selection.
 Specific Data Sheets and SDS available upon request.