



**Diamond Fleet 1K
One-Component Alkyd Enamel**

Diamond Fleet 1K features our Spectra IQ™ technology for accurate color and consistent coverage. This one-component alkyd enamel topcoat delivers full gloss and superior hiding with strong color retention. Formulated with high-performance toners and advanced color technology, it ensures durability and a uniform finish for demanding OEM and industrial applications.

PHYSICAL PROPERTIES

Weight Solids	45% to 60%	Weight per Gallon	8.5-10.1 pounds.
Volume Solids	35% to 50%	EPA VOC	3.2 pounds per gallon
Resin Type	Alkyd	Actual VOC	2.8 pounds per gallon
Gloss	Full Gloss	Viscosity	#2 Zahn – 35-45 seconds at 77°F
Theoretical Coverage	580-770 square feet at 1.0 mil	Coverage at DFT	187–535 ft ² /gal @ recommended DFT

SURFACE PREPARATION

All surfaces must be clean, dry and free of all dirt, dust, wax, oil, grease, chalk and any other contamination that would interfere with new coating adhesion.

Can be applied direct-to-metal on properly cleaned steel.

If choosing to optionally add IG-0267 Activator for quicker dry, a primer must then be used to maintain adhesion. See dry time section below for activator mixing instructions.

For long term corrosion protection, a primer is recommended. Reference primer product data sheet for Surface Preparation requirements.

Recommended primer systems: Workhorse® Primer, SLX1402-01 MMP Urethane, Stratum® Ultra R/I Urethane, Hyperprime® 2K Ultra R/I Epoxy, Stratum® Sandable Polyester Primer

Reduction Use MAK, Xylol, D-150 or TBAC.
Recommended reducing to 25-30 sec #2 Zahn for best application.

APPLICATION

Conventional Spray Equipment is recommended.

HVLP For HVLP application some reduction may be necessary. Use MAK or TBAC reducer. Recommended tip sizes should be the 1.3 – 1.5. Atomizing Air is recommended to be set at about 10 psi at the cap. When spraying metallics always watch atomizing air, gun to part distance, gun to part speed, and always use a cross coat motion.

Conventional Air For conventional air and electrostatic spray some reduction may be necessary. Use MAK or TBAC reducer. Conventional tip sizes should be the 1.3 – 1.5 tip. Pressures are dependent upon the type of gun and fluid nozzle, but typically will be in the 40 to 50-pound range for proper atomization. When spraying metallics always watch atomizing air, gun to part distance, gun to part speed, and always use a cross coat motion.

Dry Film Thickness For best results, dry film thicknesses should be 1.5 to 3.0 mils over primer. This will require wet film thicknesses of 3.0 to 6.0 mils. Apply in two medium build coats. Diamond Fleet 1K Enamel can be recoated at tack free and up to 6 hours. After 6 hours apply a small test patch to check for evidence of lifting before proceeding with a full recoat.

DRY TIMES

Diamond Fleet 1K Enamel will typically dry to tack free in 30 - 45 minutes. Dry to Handle times are typically 1-3 hours at 70°F and 50% RH. Dry through times may take several days or more. Full adhesion may be gained after 4 – 7 days dry time. Always check for evidence of lifting before proceeding with a full recoat. Lifting will typically occur between 6 – 48 hours. IG-0267 Urethane Activator can be used from 8A:1B by volume for enhanced cure, gloss, and abrasion resistance and exterior durability. If using IG-0267 Activator a primer must be used under Diamond Fleet 1K. See surface preparation for recommendations

PERFORMANCE

Tested on B-1000 0.032 CRS panels. Specific Test Results are available upon request.

Test Name	Test Method	Results
Salt Spray	ASTM B117	165 hrs direct-to-metal See primer sheet if using a primer for additional hours
Adhesion	ASTM D3359	5B to recommended primers
Weathering	SAE J2527	90%+ gloss retention at 1000 hrs 70%+ gloss retention at 2000 hrs

CLEAN UP Flush lines and equipment with xylol, ketones, or exempt reducer.

SAFETY PRECAUTIONS Contains aromatic solvents. Avoid contact with skin. Vapor and spray mist harmful. Use proper respiratory protection, including positive air supplied respirators. (Fresh Air Hoods) Refer to Safety Data Sheets (SDS) for specific information. All information subject to change without notice

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