

TECHNICAL DATA SHEET BLACK DIAMOND LOW-VOC URETHANE BASECOAT

Kirker's Black Diamond Low-VOC Urethane Basecoat is a premium automotive refinish system that meets even the strictest VOC limitations. This fast-drying high-solids color system combines the ease -of-use of conventional basecoats with superior urethane durability and the reduced environmental impact of today's waterborne basecoat systems.

Low-VOC Basecoat (LVB) colors feature a unique hybrid formulation that provides quick coverage with exceptional metallic control, excellent reparability and seriously fast dry times. Superior flowout leaves a smooth film surface. This unique high-solids resin blend also provides exceptional flexibility and chip resistance. Ideal for complete repaints, custom refinish and even repair work

- 3.5 VOC meets even the most stringent regulations
- Wide assortment of factory packaged colors
- Super protection against UV, weather, chemicals
- Easy sprayability and fast dry times

COATING TYPE:

Low-VOC Urethane Basecoat

PRODUCT CODES:

LVB Prefix

ACTIVATOR:

LVA-375 LVA-385 LVA-395

WEIGHT PER GALLON:

Varies by color

PACKAGE MEASURE:

1 US Gallon / 128 fl. oz. / 3.78 Liters

RTS VOC:

Varies by color (will not exceed 3.5 lbs/gallon)

RTS Viscosity:

20-22 seconds, #2 Zahn cup

SUITABLE SUBSTRATES:

Black Diamond Low-VOC 2K Urethane Primer Surfacer PERFECT PRIME 2K Urethane Primer Surfacer RAPID PRIME 2K Urethane Primer Surfacer DIRECT PRIME DTM 2K Urethane Primer Surfacer ENDURO PRIME DTM Epoxy Primer Surfacer

Properly prepared, OE finishes and other fully cured automotive-grade primers may also be suitable.



SURFACE PREP

Remove all traces of wax, grease, silicone, oil and other contaminants with detergent wash, followed with a solvent wash (such as Kirker's 650 Wax & Grease Remover). Abrade substrate with 600-800 grit, to ensure sufficient adhesion. Reclean with final wash cleaner (such as Kirker's 600 Surface Wash).

BLACK DIAMOND Low-VOC Urethane Basecoat can also be applied "wet on wet" over PERFECT Prime and RAPID Prime 2K Urethane Primer Surfacers after approximately 30 minutes flash time; or ENDURO PRIME DTM Epoxy Primer after 30-45 minutes flash. Be sure to mask all adjacent panels to prevent dry overspray.

COLOR

Please note that while every attempt for color consistency is made, there may be some difference in shade from one batch to the next. If using multiple cans of the same color for the same job, be sure to check for a common batch code before starting. This can be identified by the five-digit number marked either on the lid or face of the can. If batches are not the same, all materials should be blended prior to use to ensure color consistency.

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MIXING

Mix ratio: 4:1 by volume. Thoroughly mix four (4) parts BLACK DIAMOND Low-VOC Urethane Basecoat with one (1) part BLACK DIAMOND Low-VOC Urethane Activator (LVA-375, LVA-385, LVA-395, depending on the size of the job, as well as shop temperature and other conditions). See the chart below for recommended speeds.

TO MIX	12 oz	25 oz	35 oz
LVB COLOR	8 oz	20 oz	28 oz
ACTIVATOR	2 oz	5 oz	7 oz

It will be useful in most situations to add reducer (approximately 10-20%) to achieve a desired spray viscosity. Use BLACK DIAMOND Low -VOC Urethane Reducer, or if local VOC limits allow, use one of Kirker's ULTRA-GLO Urethane Grade Reducers. Note: Using ULTRA-GLO Reducers will increase the ready-to-spray system VOC, potentially rendering the mix non-compliant. Kirker recommends only persons with knowledge of current local VOC regulations and the ability to calculate total system VOC attempt to use these reducers.

	SPOT	PANEL	OVERALL
SPEED	MEDIUM	SLOW	SUPER SLOW
ACTIVATOR	LVA-375 (qt)	LVA-385 (qt)	LVA-395 (qt)
LV REDUCER	LVR-575 (qt)	LVR-585 (qt)	LVR-595 (qt)
UR REDUCER	UR-9075 (gal)	UR-9085 (gal)	UR-9095 (gal)
	UR-8075 (qt)	UR-8085 (qt)	UR-8095 (qt)

BLACK DIAMOND Low-VOC Urethane Basecoat colors can be mixed together to achieve custom shades.

POT LIFE

Approximately two hours at 70°F.

Mix only as much material as is needed to complete the immediate job.

GUN SETTINGS

GUN TYPE	TIP SIZE	AIR PRESSURE
Conventional Siphon	1.3-1.6 mm	40-50 psi
Conventional Gravity	1.2-1.5 mm	40-50 psi
HVLP	1.2-1.4 mm	8-10 psi

Always refer to gun manufacturer's recommendations for additional details on suggested tip size, air pressure and other adjustments.

APPLICATION

Apply BLACK DIAMOND Low-VOC Urethane Basecoat in two (2) full wet coats with a consistent 50% overlap pattern. Allow five (5) to ten (10) minutes for each coat to flash before reapplying color. Flash time will increase with the number of coats applied.

Most LVB colors are formulated to cover in two (2) coats. If required to achieve coverage and/or desired build, an additional coat may be applied after sufficient flash.

Only if required to help set an even metallic pattern, a light drop coat may be applied immediately after the final wet coat. For best results, decrease air pressure, hold the gun further from the panel and mist basecoat onto the wet film in even passes until the finish appears uniform.

DRY TIMES

Air-dry times may vary slightly depending on shop temperatures, airflow, humidity and total film thickness. All dry times listed are approximate, at 70-75°F.

Dust Free:	10-15 minutes
Tack Free:	20 minutes
Light sand:	15-25 minutes
Wet sand:	30 minutes
Tape:	45-90 minutes
Stripe:	Next day

CLEARCOAT/RECOAT

BLACK DIAMOND Low-VOC Urethane Basecoats may be topcoated with clear or another LVB color after 20-30 minutes. Wait longer to recoat if ambient shop temperatures are lower than normal, a slower activator/reducer combo was chosen, film build is excessive or airflow is less than ideal. A premature recoat may cause wrinkling or refloat metallic particles.

MAXIMUM RECOAT

If more than 18 hours have passed (approximate at 70°F), surface must be abraded with 400-600 grit and basecoat must be reapplied before topcoating to avoid potential delamination.

RECOMMENDED CLEARCOATS

BLACK DIAMOND Low-VOC Urethane Basecoats are compatible with any of Kirker's Urethane Clearcoats. In areas such as California, any of the OTC states, or other areas where VOC regulations require the use of clearcoat systems below 2.1 lbs/gallon, then BLACK DIAMOND Low-VOC Clearcoat (EC350) is the only compliant option.

CLEANUP

Close all containers tightly after each use. Clean gun and spray equipment with Kirker's VOC Compliant Gun Wash (670) or other appropriate solvent products immediately after application to prevent damage.

HEALTH / SAFETY

THIS PRODUCT IS INTENDED FOR USE BY PROFESSIONALS ONLY. READ ALL WARNINGS ON ALL LABELS BEFORE USING.

This product is designed to be mixed with other components. Mixture will have hazards of all components. Before opening the packages, read all warning labels. Follow all precautions. See Safety Data Sheet for additional health and safety information.

WARRANTY

All recommendations for the use of Kirker products are based on tests and experience believed to be reliable. Since the methods of use, conditions of application, and the application itself are beyond our control, product warranty is restricted to replacement of material only. No other warranty, written or oral, is expressed or implied.

CONTACT FOR MORE INFO

(800) 307-7951 Toll Free info@kirkerautomotive.com www.KirkerAutomotive.com