



High Build Epoxy Primer

L-411 · L-417 · L-418 | ACTIVATOR
L-421

Technical Data Sheet

Revision: July 2026

4:1 True Epoxy Primer / Surfacer



L-411 Blue Primer

Activator
L-421



L-417 Black Primer

Activator
L-421



L-418 Gray Primer

Activator
L-421

All three colors share the same formula, mix ratio, activator (L-421), and application procedure. Because every color is **gravimetrically identical**, they can be intermixed in any proportion to achieve any shade between blue, black and gray. Throughout this data sheet, any reference to L-411 applies equally to L-417 and L-418.

Description

An expertly formulated **4:1 true epoxy** (not a hybrid) high build primer / surfacer engineered for outstanding adhesion, chemical resistance, and corrosion protection. Built with an inorganic-organic corrosion inhibitor and anti-corrosive pigment that encapsulate and neutralize rust, it also carries moisture-scavenger properties and is designed for superior build and sandability. In head-to-head shop testing, Linear High Build Epoxy Primer outperformed 11 other primers in nearly every category.

Note: This product is a primer / surfacer only. It is **not a sealer** and should not be used as a sealer.

The product is designed to be used over bare metal, body-worked over, and then used again as a high build primer over filler work — one bulletproof product from metal up. Running a single primer throughout the entire body-work process delivers excellent uniformity: every layer expands and contracts at the same rate through temperature and environmental changes. The old practice of layering epoxy over metal, then a spray polyester, then a 2K urethane before paint is no longer necessary — those dissimilar products shrink, expand and contract at different rates and can lead to cracking or "phantom waves." Combining one primer from metal up with properly weighed filler mixes leads to no shrink-back and a finish built to last for years.

PERFORMANCE HIGHLIGHTS

- 4:1 true epoxy — not a hybrid
- Highest dry film build in its class
- True 76% solids content (material left on the panel)
- Done shrinking in 24–48 hours
- Very easy sanding
- Excellent adhesion as a bare-metal DTM primer
- Corrosion resistance with rust encapsulation & moisture-scavenger properties
- Gravimetrically identical colors intermix to any shade
- One product from metal up = uniform expansion & contraction

Compatible Topcoats

We recommend the **Alpha Automotive** paint line first for best results. Also compatible with 2K topcoat systems, 2K urethane surfacers / sealers, single stage and basecoats, urethane and epoxy sealers, and spray polyesters.

*Contact Linear for more information on topcoats.

■ ■ Product Data & Required Products

Colors	L-411 Blue · L-417 Black · L-418 Gray
Required activator	L-421 hardener (all colors)
Mix ratio	4:1 by volume
Solids by volume	65% ± 2%
Solids by weight	76% ± 2%

Induction time	20 minutes (required)
Pot life	2–3 hrs @ 75°F
Dry film build / coat	3–5 mils
Max dry film	Do not exceed 10 mils after sanding
Min. panel temp	65°F (hold 48 hrs)

■ Surface Preparation

As an epoxy over bare metal: thoroughly sand bare metal with **no finer than 80-grit**, or sandblast. Sandblasted parts do not need to be sanded but may be scuffed with no finer than 80-grit. Clean bare metal thoroughly with a quality acetone cleaner before coating.

As a high build surfacer over body work, previous paint work, primer, or fiberglass: finish sand the substrate with **150–240 grit**, then clean with a quality wax and grease remover before coating.

If any bare metal is showing on a previously coated, body-worked, or primed panel: sand the exposed **bare-metal areas only** with an orbital (DA) sander to establish proper tooth (no finer than 80-grit, per the bare-metal prep above). Sand the remaining coated areas with **120–240 grit**, then clean the entire panel with a quality wax and grease remover before coating.

DO NOT USE AN ETCH PRIMER.

*Not all blasting media are suitable to be coated — do not use soda blast. Contact Linear for more information on suitable blasting media.

*Metal prep systems such as SX579 / 520 may be used.

■ ■ Mixing — 4:1 Ratio

Before mixing: The primer **must be shaken on a paint shaker for at least 10–15 minutes**, or until it reaches an even consistency. If no shaker is available, using a **paddle on a drill** is the best second option — **always check the bottom of the can** to confirm all solids are evenly dispersed. **Always strain through a paint strainer** before spraying.

Mix **4 parts primer (L-411 / L-417 / L-418) to 1 part L-421** activator. For 100% mix-ratio accuracy, weigh by grams on a scale using the gravimetric formulas below (values shown in grams).

Batch size	Primer (L-411 / L-417 / L-418)	Activator (L-421)
8 fl oz (½ pint)	328.0 g	55.2 g
16 fl oz (pint)	656.0 g	110.4 g
32 fl oz (quart)	1312.0 g	220.8 g
64 fl oz (½ gallon)	2624.1 g	441.5 g
128 fl oz (gallon)	5248.2 g	883.0 g

*Contact Linear for more gravimetric formula mix sizes.

20-minute induction time is required. Do not use if panel temperature is below 65°F, and always keep panel temperature at 65°F or above for at least 48 hours after application. Pot life is 2–3 hrs at 75°F.

*May be reduced up to 10% with a quality urethane reducer such as DT1575 or comparable. 10% reduction by volume is only recommended for bare-metal application.

Application

Spray Setup	
HVLP	1.4–1.8 tip · 20–30 psi at regulator
RP	1.4–1.8 tip · 8–15 psi at regulator

Coats	
Over bare metal	2 medium wet coats (reduced 10% by vol)
High build surfacer	2–4 medium wet coats, 4:1, no reduction
Flash between coats	30 minutes

SPRAY IN A WARM ENVIRONMENT. Do not allow panel temperature below 65°F for at least 48 hrs. If you cannot keep panel temperature above 65°F for 48 hrs, do not use the product.

Dry film build per coat: 3–5 mils. Do not exceed 10 mils dry after sanding.

Dry Times & Recoat

Set to touch	4–5 hrs @ 75°F
Dry to handle	16 hrs @ 75°F
Dry to sand	48 hrs (ideally infrared bake or bake in hot sun)
Dry to topcoat	48 hrs; must be sanded / scuffed
Done shrinking	24–48 hrs

Recoat: The primer must be sanded before a topcoat is applied. Minimum time before recoat is **48 hours** and sanding / scuffing **is required**. If applying body filler over the primer, it must first be sanded thoroughly with 80–180 grit before applying filler or glazing putty.

For best sandability: Infrared bake the panels at **140°F for a minimum of 30 minutes**, or let the panels bake in the hot sun.

Adhesion

Excellent adhesion to cold rolled steel, hot rolled steel, galvanized, stainless steel, aluminum, and composite fiberglass (terminated with wax, not silicone).

Video Resources



Proper use & application as a high build

youtube.com/watch?v=Xn_NEIRxuqQ

Scan the QR code to watch



Proper use over bare metal

youtube.com/watch?v=Svh1y_UP6oQ

Scan the QR code to watch

Caution

In case of skin contact, flush with water. For eyes, flush with water for 15 minutes and seek medical attention. If exposed to high concentrations of vapors, remove to fresh air. If swallowed, call a physician or poison control immediately at **1-800-222-1222**. Always consult the product SDS before use and wear appropriate respiratory and skin protection.

The data in this bulletin is accurate to the best of our knowledge; however, no guarantee of accuracy is given or implied. We are constantly improving our coatings and formulas, so data may vary slightly from the time of this bulletin. Due to variations in customer handling and application methods beyond our control, we assume no responsibility for coverage, mil thickness, performance, or injury or damage resulting from use. The consumer/user is responsible for substrate compatibility verification.