

SELECTION & SPECIFICATION DATA

Generic Type	Low VOC Epoxy Primer
Description	A low VOC epoxy primer for concrete and steel. It is used to increase adhesion and reduce the potential for outgassing on concrete substrates. It can also be used to prevent abrasive blasted steel from developing rust bloom prior to the application of a coating or lining system.
Features	<ul style="list-style-type: none"> • Tolerant to moisture vapor transmission (<5 lbs per 1000 ft² / <24.4 g/m²) • Low VOC • Low Odor • Meets SCAQMD Rule 1113 for VOC content • VOC Compliant with LEED 4.1
Color	Clear (0000)
Dry Film Thickness	3 - 4 mils (76 - 102 microns) DFT
Solids Content	100%
VOC Values	As Supplied : 38 g/L
Topcoats	Primer for epoxy and urethane systems. Topcoat selection will depend on exposure
Application	For maximum performance, all steel surfaces should be primed. Concrete, however, must always be primed to aid in the "wetting out" required for good adhesion.

SUBSTRATES & SURFACE PREPARATION

General	With all epoxies after priming and before each additional coat, examine the surface for amine blush (oily film). If present, remove by washing with warm water and detergent.
	Concrete shall be designed, placed, cured, and prepared per NACE No. 6/SSPC-SP 13, latest edition. Abrade to remove all laitance, loose concrete, etc. and to create surface profile in accordance with ICRI CSP 2 or greater.
Concrete	The prepared surface should have a tensile strength of 250 PSI per ASTM D-7234. All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D-4263. If moisture is present the use of Vapor Stop Primer may be required. Consult your Dudick representative for further information about moisture vapor transmission or specific profile requirements which are dependent on the selected topcoat.
Ferrous Metal	Surfaces must be abrasive blasted to an appropriate finish according to the topcoat's product data sheet or System Information Sheet. If not listed, minimums are below: <u>Immersion and heavy spillage service:</u> White Metal SSPC SP-5 or NACE No.1, 3.0 mil minimum profile. <u>Heavy, non-immersion service (i.e. fumes and spillage):</u> Near white SSPC SP- 10 or NACE No.2, 2.0 mil minimum profile. <u>Atmospheric service:</u> Commercial SSPC SP-6 or NACE No.3, 2.0 mil minimum profile.
Non-Ferrous Metals	Surface profile should be a dense angular 1.5 - 3 mils and is best achieved through abrasive blasting in accordance with SSPC-SP16 for atmospheric exposure, or SSPC-SP17 for immersion environments.

Primer 67LV

PRODUCT DATA SHEET



PERFORMANCE DATA (TYPICAL VALUES)

Test Method	Results
Adhesion to Concrete ASTM D7234	Cohesive Failure of concrete
Adhesion to Steel ASTM D4541	2,200-2,500 PSI (15.2 - 17.2 MPa)
Tensile Elongation ASTM D638	20-25 %
Tensile Strength ASTM C307	5,000 PSI (34.5 MPa)

MIXING & THINNING

Mixing | Mix Part A with power mixer. Then mix the pre-measured unit of Part A with Part B until homogenous.

Thinning | DO NOT THIN

Ratio | 1.67:1 by volume (A:B)

To prevent material waste and avoid damage to equipment, do not mix more material than can be used.

Pot Life | 90 minutes @ 50°F (10°C)
60 minutes @ 75°F (24°C)
30 minutes @ 90°F (32°C)

Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

General | Brush and/or roller

Spray Application | Pump Ratio: 30:1 or greater, capable of at least 1 GPM.
Filters: 60 mesh filters
Material Hose: 3/8" I.D. (min.), 3000 psi or greater rated.
Tip Size: 0.015"-0.019"
Output PSI: 2500-3000 psi (min.)
Gun: Airless gun rated for at least 3000 psi.

When siphon feed is used, change the pail out as frequent as necessary to avoid exotherm of the catalyzed material.

Brush & Roller (General) | Use a short-nap mohair roller cover with solvent resistant core. For best results, condition roller before application to minimize lint or loose fibers. A high quality solvent resistant brush may be used for hard to reach areas.

APPLICATION PROCEDURES

General | Prime all surfaces to be coated at 3-4 mils (76-102 microns). **Do not allow the primer to puddle.** At stated minimum recoat times, primer may still be tacky. To optimize intercoat adhesion, it is recommended to apply the basecoat over primer that is tacky. If this is not possible, adhere to maximum recoat times referenced in the curing schedule.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	80°F (27°C)	110°F (43°C)	110°F (43°C)	90%

Substrate temperature must be 5°F (3°C) above dew point.

CURING SCHEDULE

Surface Temp.	Minimum Recoat Time	Maximum Recoat Time	Cure for Service
50°F (10°C)	8 Hours	5 Days	5 Days
75°F (24°C)	4 Hours	3 Days	3 Hours
90°F (32°C)	2 Hours	2 Days	2 Days

- To optimize intercoat adhesion Primer 67LV may be top coated once it is dry enough to be tacky but does not transfer when touched.
- Application in direct sunlight may lead to blistering, pinholes, or wrinkling due to outgassing of air in the concrete and high substrate temperatures. Double priming, shading, or evening application may be required.
- Exposure of the primer to direct sunlight or heat will considerably shorten the recoat times.
- If recommended recoat times are exceeded, sanding or abrasive blasting may be required before further coats can be applied.

CLEANUP & SAFETY

Cleanup	Use S-10 Cleaning Solvent or Carboline Thinner 2 to clean tools and equipment.
Safety	Read and follow all caution statements on this product data sheet and on the SDS. Employ normal safety precautions. Keep container closed when not in use.
Ventilation	Ventilation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. Use MSHA/NIOSH approved air respirators as needed.
Caution	Fire and explosion hazards: This product contains less than 1% volatile components, however, vapors are heavier than air and can travel long distances, ignite and flash back. Eliminate all Ignitions sources. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Packaging	1 Gallon Kits: Part A: 0.625 Gallons (in a 1 gal can) Part B: 0.375 Gallons (in a 1 gal can) <hr/> 5 Gallon Kits: Part A: 3.125 Gallons (in a 5 gal pail) Part B: 1.875 Gallons (in a 3.5 gal pail)
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PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 12 months Part B: 12 months
	When stored in their original, unopened containers. Exposure to excessive heat may cause premature gelling, reduce working time and shelf life.
Storage	All products should be stored in a cool, dry area away from open flames, sparks or other hazards.
	Warning: All Dudick products classified by DOT with either white, yellow or red labels, must not be mixed or stored together as an explosive reaction can occur. All products should be stored in a cool, dry area away from open flames, sparks or other hazards.
Shipping Weight (Approximate)	1 Gallon Kit (3.79 liter kit): 12.5 lbs (5.7 kg)
	5 Gallon Kit (18.9 liter kit): 49.25 lbs (22.3 kg)

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.