



Poly Urethane Cement

Product Data Sheet

PRODUCT DESCRIPTION

LDL Poly Urethane Cement SL3 is a seamless self-leveling Urethane modified concrete topping. Ideal for medium to heavy duty traffic areas where thermal shock resistance is a requirement. LDL PUC SL3 exhibits excellent impact and chemical resistance. It is tolerant to moisture vapor emission on well-prepared concrete substrates. Its built-in textured surface reduces slipping under wet conditions. LDL PUC SL3 can be installed with an integral cove base for areas requiring seamless wall to floor systems. It will not support the growth of fungus or bacteria. Installing LDL PUC SL3 with a textured surface reduces slipping under most wet conditions. It is a smart choice for wet areas like those typically found in dairies, food processing areas, commercial kitchens, breweries, bakeries, etc.

LDL PUC SL3 ADVANTAGES AND BENEFITS

- VOC compliant
- ADA compliant
- Convenient 4:1 mix ratio
- Excellent adhesion
- Extraordinary chemical resistance
- Easy Maintenance
- Many color options available
- Can be applied to 7-14 Day old concrete
- Mildew Resistant

LIMITATIONS

Not recommended for use over flexible substrates. It is best suited for applications in temperatures between 60 deg F to 85 deg F. LDL PUC SL3 can be slippery when oily. Substrate must be clean, sound and dry. To minimize pinholes and surface defects, a primer coat of water-based epoxy primer is recommended. Concrete shall be moisture cured for a minimum of 28 days and have a minimum of 14 days in accordance with ACI-308 prior to the application of coating pending moisture tests. Do not apply to unreinforced sand screeds, asphalt, or bitumen substrates, magnesite, copper, metal, polyester or elastomeric membranes.

LDL PUC SL3 TYPICAL USE AREAS

- Commercial Kitchens
- Food processing
- Airport hangers
- Clean rooms
- Pharmaceutical plants and laboratories
- Chemical processing facilities and warehouses
- Breweries/ Distilleries
- Storage facilities
- Light manufacturing

SUBSTRATE REQUIREMENTS

The site must be free of dirt, waxes, oils, curing agents, or other foreign agents and free from condensation or water contamination during application and cure. Shot blasting or scarifying is required. Expansion joints in the substrate must be honored. Movement of substrate cracks may transmit through the system. It is recommended that the perimeter edges of the floor area and doorways be keyed.

APPLICATION METHOD

The floor must be primed properly before applying the LDL PUC SL3. LDL PUC SL3 is then applied at 55 sqft per kit using a ½ "v-notched squeegee, the loop rolled. Service temperature must range from -100 F to 220 F

To achieve 125 mil base coat application, replace the ½" v-notched squeegee with #2 CAM rake and apply at 40 sqft per kit.

One kit consists of 3 components, Pour Part A and Part B into an empty pail and mix for 30 seconds. Add Part C slowly to the mixture while continuously mixing the liquid components. Mix all the components for 3-4 minutes. Ensure thorough mixing of all the components without changing their proportions. **CLEANUP** The mixing bucket and mixing paddle should be scraped thoroughly and cleaned with solvents like MEK or Xylene after mixing 2 to 3 kits. If plastic pails are used for mixing, dispose of the bucket after every 3 to 4 mixes. Use new pails every 3 to 4 mixes.

PACKAGING AND STORAGE

LDL PUC SL3 is provided in kits that include A and B liquids in 1gal plastic jugs along with a 50# bag of finely grade mineral fillers. Kits should be stored in a clean, dry area in stable temperatures approximating 55 to 90 deg F.

APPLICATION

LDL PUC SL3 is self-leveling grade available in two different grades. One that can be applied between 1/16" to 1/8" and another that can be applied between 3/16" to ¼" thickness. Using a notched trowel or gauge, rake the mixed product evenly at the desired thickness. Use a 3/8" nap roller or loop roller and lightly back roll the surface while it is still wet. Always maintain a wet edge. It is recommended to wear spiked shoes to walk into the wet material.

MOISTURE CONCERNS

Limits for moisture vapor transmission for epoxy systems are 3lbs/1000sqft/24 hours using the calcium chloride test, per ASTM F1869.



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MAINTENANCE

Regular cleaning and maintenance will prolong the life of all polymer flooring systems and enhance their appearance. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly. LDL PUC SL3 is easily cleaned with neutral soaps or detergents. Routine mechanical scrubbing is recommended for all surfaces having a non-skid texture. Waxing is optional, long periods of heavy traffic may cause wear patterns necessitating application of a finish coat.

TECHNICAL DATA FOR LDL PUC SL3

Physical Property	Test Method	Result
Hardness (Shore D)	ASTM D2240	75-80
Tensile Strength	ASTM D638	2,175 psi
	ASTM C307	1,000 psi
Adhesion to Concrete	ASTM D4541	>400 psi, Concrete fails before loss of bond
Compressive Strength	ASTM C579	9,000 psi
Flexural Strength	ASTM D790	5,076 psi
	ASTM C580	2,400 psi
Static Coefficient of Friction	ASTM D2407	>0.6
Impact Resistance	MIL-D-3134,	Pass
Abrasion Resistance	ASTM D4060	24 mg loss
	CS-17 wheel, 1000 GM load, 1,000 cycles	
VOC	EPA Method 24	0.0g/L, compliant To low VOC Rule 113 in all 50 states

CHEMICAL RESISTANCE

LDL PUC SL3 has excellent resistance to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents. Some acids may discolor or bleach the surface.

HEALTH AND SAFETY

Read carefully and follow Material Safety Data Sheets and application instructions for the PUC SL3 flooring system prior to use. Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment and clothing to use when handling this product. Use only as directed. KEEP OUT OF REACH OF CHILDREN.

WARRANTY

LDL Precision Tool warrants that for a period of one year that its products will be free of manufacturing defects and will be in conformity with published specifications when stored, handled, mixed, and applied in accordance with LDL Precision Tool recommendations. If any product fails to meet this warranty, LDL Precision Tool's liability will be limited to replacement of any non-conforming material if notification is made to LDL Precision Tool within the one-year period. In order to obtain replacement or refund for the value of the non-conforming materials, the customer must provide written notice containing details of the non-conforming performance. LDL Precision Tool reserves the right to inspect the non-conforming material before replacement is made. Except for the expressed warranty stated here, there are no other warranties, expressed or implied, including without limitation, any implied warranty of merchantability or fitness for any other purpose. LDL Precision Tools obligation shall not extend beyond the obligations expressly undertaken above and LDL Precision Tool shall have no liability or responsibility to the purchaser or any other third party for any loss, cost, expense, damage, liability, weather direct or indirect, or for incidental or consequential damages.

INSTALLATION INFORMATION

Cure time @ 70F(21 C)	
Recoat	6-8 hrs
Light Traffic	8-10 hrs
Light Vehicular Traffic	6-24 hrs
Heavy Traffic	24-48 hrs
Return to Service	3-5 days
Mix Ratio	1 Gal Part A, 1 Gal part B, 1 – 50# Bag, 3 component kit
Working time	15 min
Toxicity	Sensitized individuals do not install