LIFE PAINT
PRODUCT SPECIFICATIONS

CLEAR SEALERS

LD9600 2 COMPONENT HIGH SOLIDS WATER BASED URETHANE

Description
LD9600 WB CRU is a two component, high solids, water base, aliphatic polyurethane. The excellent UV resistant, mar resistant, chemical resistant nature of this product will cause it to outperform most other types of sealers or topcoats without the unwanted smell of solvents.
LD9600 is a High-Gloss Finish.
LD9600S is a Satin-Gloss Finish.

Uses
LD9600 WB CRU is designed for professional use only and is specified as the finish coat for use in moderate to severe chemical environments or in medium-heavy traffic areas. This U.V. resistant coating can be used in both indoor and outdoor applications. Apply LD9600 WB CRU as a coating over Life Paint's water base and 100% solids epoxy floor coatings. WB CRU is also used as a sealer on a variety of other substrates such as decorative concrete overlays and acid stained concrete flooring. Use LD9600 WB CRU on Garage Floors, Decorative Floors, Restaurant Floors, and Food Processing Facilities.

Advantages
- SCAQMD VOC Compliant (VOC < 50 g/l)
- Chemical Resistant
- Color and Gloss Retention
- Impact & Abrasion Resistant
- No Solvent Smell
- Water based formula

Coverage
300-400 sf per gal as a coating
400-450 sf per gal as sealer (thin with 10% water)

Packaging
1½ gallon kits premeasured with Hardener A in ½ gallon and Resin B in 1 gallon containers
15 gallon kits premeasured in three 5 gallon pails

Inspection
Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170). All moisture should be kept away a min. of 72hrs before application and a min. of 72 hours after installation. This includes high humidity, sprinklers, rain, fog, dew, etc. Make sure relative humidity of the air is < 70% to ensure an even gloss finish.
Before starting flooring work, test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts have a tendency to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is ran, and cannot be used to predict long-term conditions.
Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for a floor coating's installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 2.5lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure to install LD9600 directly over concrete. If the reading is any higher, please consult your Life Paint Company Salesman for further instructions.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or all together failure of the coating system. Testing is the responsibility of the applicator. Life Paint bears no responsibility for failures due to any of the above conditions.

Surface Preparation
Over Concrete: Shotblasting is the preferred method for preparing concrete when applying epoxy and urethane floor systems. When using other methods, prepare the surface so that the surface is porous and contaminant free so the product can soak in and properly bond.
As a Sealer Over Concrete: When applying WB CRU directly over porous concrete as a clear sealer, the surface may be lightly abraded. Make sure no contaminants or prior sealers are present.
Recoat or Over Epoxy: Apply directly over existing coat of LD9600 within 24 hours of application of previous coating. When applying over 100% solids epoxy or recoating over existing LD9600 that has been cured for longer than 24 hours, sand the surface with 100-150 grit sand paper, remove debris and wipe with acetone just before new application.

Mixing
As Coating over Concrete, Epoxy, or CRU: Before application, it is imperative that Side B Resin is mixed separately prior to combining material. Add 1 part of the A-Side to 2 parts of the B-Side while mixing, using a mechanical mixer (Jiffy Mixer) at low to medium speeds. For proper leveling purposes, add 8-12 fl oz water to 1½ gallon mix. Mix until a homogeneous mixture and streak-free appearance is attained (approximately 3 minutes). Use care to scrape the sides of the container to ensure that no unmixed material remains.

As a sealer over concrete: When applying as a clear sealer directly on acrylic cements or acid stained concrete, it is recommended to thin the CRU with a maximum total of 10% water (20 oz) per 1½ gallon kit. Thinning will aid in penetration, help avoid puddles and help avoid bubbles and unevenness. Make sure to proper neutralize floor if acid stained. If a second coat is to be applied, dilute mixed product with up to 5% water (10 oz).

Application
The LD9600 WB CRU material may be squeegeed, rolled or brushed. Apply product within 24 hours after previous coating is applied. Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be cut in using a brush or trowel. Leave remaining material in bucket and spread evenly using a 3/8" non-shedding nap roller cover beginning near the cut in area. Apply quickly and avoid overrolling, as product will begin to "tack-up" as it begins to cure.

Re-coat if needed within 24 hours of application to ensure adhesion. If a delay occurs, it is recommended that the surface be sanded and wiped clean with acetone before reapplication.

Maintenance:
Cleaning the CRU is best done by mopping surface with mild soap and water or a mild detergent.
For best appearance, Life Paint recommends resealing the surface every 3-4 years. Reseal by lightly sanding existing coating, cleaning surface, and applying CRU over dry surface using above application specifications

Limitations
- Do not apply in temperatures below 50°F or above 90°F.
- Do not apply unless temperature is 5° above the dew point or if rain is expected within 24 hours.
- Do not apply on damp or moist surface as product will whiten and may cause delamination.
- Apply only if relative humidity < 70% to ensure an even gloss finish
- Opened material must be used within 2 days.
- 1 gallon must cover at least 275 sf to properly cure.
- Please read SDS sheet before use.
- Shelf Life of this material is 1 year from the date of manufacture. (See batch number for manufactured date)
- Life Paint recommends the use of angular slip resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards.

Clean Up
Uncured material can be removed with soap and water or an environmentally safe solvent immediately after use. Cured material can only be removed mechanically. All empty containers must be disposed of according to local, state, and federal regulations.

Warranty
Life Paint Company guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. Life Paint makes no other warranty, expressed or implied, and all warranties of merchantability and fitness for a particular purpose are hereby disclaimed. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product. Manufacturer shall not be liable for material used outside of its shelf life. For product dating, please refer to the batch number on the product or contact Life Paint Company.

	Test Method	Results	
Shelf Life		6 months	
Mixing Ratio by Volume A:B		1:2	
Wet Film Thickness per Coat		3-5 mils	
Dry Film Thickness per Coat	ASTM D-3363	1 ½ - 3 mils	
Tear Resistance DleC	ASTM D-1004-66	270 pli	
Tensile Strength	ASTM D-412	3980 psi	
Ultimate Elongation	ASTM D-412	30%	
Gloss (60 deg)	ASTM D-823	LD9600 = 85 (±5)	LD9600S = 25 (±5)
Volume Solids ASTM D-2697	61% by volume		
VOC	ASTM D 2369-81	<50 g/l	
Pot Life (75±3°F)		60 minutes	
Recoat Time		7 hrs (min) -24 hrs (max)	
Taber Abrasion	ASTM D-4060-84 1000 Cycles	33.9 mg Loss, C17 Wheel, 1000g Load,	
Impact Resistance	ASTM D-2794-84	Inch-pounds Direct 160 Reverse 160	
Pencil Hardness	ASTM D-3363-84	2-H	
Pendulum Hardness	After 1 Day	43 Seconds	
	After 7 Days	168 Seconds	
Mixed Viscosity at 75 F(24 C) 50% RH		800 cps	
Mixed viscosity with 5% water dilution		520 cps	
Weight		A-SIDE	9.1 lbs/gal
		B-SIDE	9.0 lbs/gal
Flash Point		A-SIDE	<365 F
		B-SIDE	n/a

Chemical Resistance Testing:		
14 Days Cured	4 hrs	24hrs
10% Acetic Acid	No Effect	No Effect
10% Sulfuric Acid	No Effect	No Effect
10% Hydrochloric Acid	No Effect	No Effect
14% Ammonium Hydroxide	No Effect	No Effect
50% Sodium Hydroxide	No Effect	No Effect
IPA - Iso-Propyl Alcohol	No Effect	No Effect
MEK - Methyl Ethyl Ketone	No Effect	No Effect
Deionized (Water)	No Effect	No Effect
10% Betadine	No Effect	No Effect
10% Bleach	No Effect	No Effect
Gasoline	No Effect	No Effect