CFFS POLY-3 WB™ ALIPHATIC URETHANE

Product Description

CFFS Poly-3 WB is a premium clear water-based two-part high performance urethane coating which utilizes aliphatic urethane polymer technology. It provides excellent film hardness, chemical, and abrasion resistance with less than 50 grams/liter VOC. Poly-3 WB can be applied to directly to many surfaces without the need of a primer. High Gloss or Matte finish available.

Product Features

- High Gloss or Matte finish
- UV Resistant-non yellowing
- Great scratch and abrasion resistance
- Excellent chemical resistance
- Clear top coat over broadcast system
- Easy to use 50 VOC low odor formula
- Excellent hot tire pick up resistance
- Vertical or horizontal application
- Available in one gallon quantities

Primary Applications

- Food Processing areas
- Bottling areas
- Sanitize/wash areas
- Clean rooms
- Kitchens
- Warehouse floors

Packaging

Product is sold CLEAR in one gallon kits.

DISPOSAL: Collect with absorbent material. Dispose of in accordance with current local, state and federal regulations.

LIMITATIONS: This product is not designed for immersion or any use where moisture can reach the underside of the coating. Do not apply to floors that have been treated with a curing compound (unless removed) or substrates that less than 30 days old. Do not use on vinyl, asphalt, glazed tile, paving brick, quarry tile, Mexican tile, or similar materials. Do not apply if surface temp is below 50F.

Typical Physical Properties

Tensile Strength	ASTM D412	2900
Konig Hardness	ASTM D4366	111
Flexibility, 1/8" Mandrel	ASTM D1737	Pass
Abrasion Resistance	ASTM D4060	
CS-17 Wheel (1,000 gm Load)	4 mg Loss / 1000 cycles	
Gloss	ASTMD-523 @60°	91+
Permeability	1.39 Perms	
VOC Content	<50 g/l	
Impact Resistance	>160 inch/lb	

Typical Processing Properties

Two Component - 75ºF	Tack Free-6 hours
Relativity Humidity - 54%	Hard dry-24 hours
Recoat Min-6 hours / Recoat Max – 24 hours	
Light Foot Traffic	24 Hours
Vehicle Traffic	5 Days

Coverage: 1,600 square feet, per gallon, per mil.
Recommended Coverage

Topcoat Over Smooth Surface	**250-400 sf/gal**
Top Coat over Broadcast surface	**250-400 sf/gal**

VOC compliant in all 50 states and Canada

Adhesion Results

ASTM D-4541 Elcometer

Concrete-no primer	concrete failure	>460psi
Concrete-primer	concrete failure	>550psi

Temperature

50°F - 95°F

Optimal installation temperature is 65°F -80°F (18°C -27°C). Extreme cold applications may slow the cure time.

Surface Preparation

Concrete

Shot Blasting, diamond grinder w/30 grit or coarser or acid etching is required to remove the surface laitance that appeared during the curing process. This will also help to remove surface contaminants. Any oils or fats must be removed prior to product application. Do not apply to wet substrates. Chloride, moisture and pH levels should be checked prior to application. For new concrete, the concrete should be allowed to cure for a minimum of 30 days unless using a CFFS Ultra-Hydro Stop Primer. Prepared surface must achieve a profile of CSP-2 to CSP-3 as described under ICRI Technical Guideline No. 03732.

Aluminum, Galvanized Steel, Non-Ferrous Metals

All metals must be prepared to a near white surface that is equivalent to SSPC 10 or NACE 2. For immersion service, a 3 mil blast profile is recommended. A 2 mil profile is generally Accepted.

Wood

Sand new wood to remove any surface contaminate and to lower the grain. Test patches are recommended.

Application Information

Application Conditions: Temperature of the air, substrate and material should be between 50F and 95F. Relative humidity should not be above 80%. Two coats are recommended with a minimum of 6 hours and a maximum 24 hours between coats.

Mixing: Mix part "A" by using a low speed drill with mixing attachment for 2 minutes. Add Part "B". Mix an additional 2 minutes. Mix only what the amount of material to be used during the pot life (Approx. 1 hour) Do not over mix and aerate the material. Apply immediately.

Application: Apply using a 3/8" short nap roller for horizontal surfaces and 1" nap for vertical. Apply light coats no more than 24 hours between coats.

Brush

Inexpensive natural fiber chip brushes are suggested – 2" to 4" width depending on the application. These will be one-time use items.

CLEAN UP: Clean tools and application equipment immediately after use with Acetone or Xylene.

HANDLING: Do not breathe mixed product vapors or dust. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapor or dusts.

KEEP FROM FREEZING: Store in cool, well ventilated area above freezing.

Warranty

The technical data and any other printed information furnished by CFFS are true and accurate to the best of our knowledge. CFFS POLY-3 WB™ conforms to in house quality control procedures and should be considered free of defects. The data provided is believed to be reliable and is offered solely for evaluation. The use of this product is beyond the control of the seller, therefore the buyer assumes all risks of use and handling whether done in a matter that is in accordance with the provided posted directions or not. CFFS makes no warranty; expressed or implied, of its products and shall not be liable for indirect or consequential damage in any event.

Chemical Resistance

Acetic Acid 100%	RC
Acetone	R
Ammonium Hydroxide 50%	RC
Benzene	RC
Brake Fluid	C
Brine saturated H2O	R
Chlorinated H2O	R
Clorox (10%) H2O	R
Diesel fuel	RC
Gasoline	R
Gasoline/5% MTBE	R
Gasoline/5% Methanol	R
Hydrochloric Acid 20%	R
Hydrofluoric Acid 10%	RC
Hydraulic fluid (oil)	RC
Isopropyl Alcohol	R
Jet Fuel (JP-4)	R
Lactic Acid	RC
MEK	NR
Methanol	R
Methylene Chloride	C
Mineral Spirits	R
Motor Oil	R
MTBE	C
Muriatic Acid 10%	R
NaCl/H2O 10%	R
Nitric Acid 20%	RC
Phosphoric Acid 10%	RC
Phosphoric Acid 50%	NR
Potassium Hydroxide 10%	R
Potassium Hydroxide 20%	R, Dis
Propylene Carbonate	RC
Skydrol	RC
Sodium Hydroxide 25%	R
Sodium Hydroxide 50%	R, Dis
Sodium Hypchlorite 10%	RC
Sodium Bicarbonate	R
Stearic Acid	R
Sugar/H2O	R
Sulfuric Acid 10%	R
Sulfuric Acid >50%	R
Toluene	R
1, 1,1-Trichlorethane	C
Trisodium Phosphate	R
Vinegar/H2O 5%	R
H2O 14 days at 82° C	R
Xylene	NR

Chemical Resistance Key

R=recommended/little or no visible damage
RC=recommended conditional/some effect, swelling or discoloration
C=Conditional/Cracking-wash within one hour of spillage to avoid affects
NR=Not recommended
Dis=Discolorative

**Chemical Resistance Test Method followed ASTM D1308