



## PRODUCT DATA URETHABOND 166

Coatings For Industry, Inc. • 319 Township Line Road, Souderton, PA 18964 / 215-723-0919

### Description

Two package aliphatic urethane, acrylic type, finish coating for exterior applications.

### Color

Available in standard full gloss colors and clear. Special colors and gloss can be matched upon request.

### Packaging

One and five gallon kits, premeasured for easy blending at jobsite.

### Uses

URETHABOND 166 has non-yellowing, non-chalking properties combined with good chemical resistance and excellent gloss retention and will continue to retain a high gloss through many years of service. It is suggested for use as a high performance coating where chemical fumes are moderate, such as gasoline and oil storage tanks. Because of its excellent weather resistant properties, it also finds usage on steel towers, water storage tanks, industrial buildings and as a general maintenance and architectural coating, including use on masonry substrates. It is not recommended for use as a floor coating, however.

URETHABOND 166 can be applied over a wide variety of properly prepared and primed substrates including structural steel, cold rolled steel, aluminum, concrete, plastics and galvanized steel. Generally it is used as a topcoat over URETHABOND 104, URETHABOND 109, or WEARCOAT 499 primers.

### Surface Preparation

New metal surfaces should be cleaned of oil, grease and dirt. To obtain optimum results, the metal should be sandblasted and URETHABOND 104 or WEARCOAT 499 primer applied then topcoated with URETHABOND 166. If metal surface is rusted and sandblasting is not practical from application or cost standpoint, URETHABOND 104 can be applied directly over rust which is tightly adherent. Although this situation is not as ideal as sandblasting, excellent results have been obtained. When painting over previously painted surfaces a spot test should be made to check for lifting. Dirt and loose paint should be removed by suitable method and spot primed before application of finish coat. It is extremely important that surface is free of all moisture prior to coating application or downglossing or blistering of paint film may occur.

### Technical Data

Volume Solids:	46% (varies with color)
Weight Solids:	66% (varies with color)
Dry Film Thickness, Minimum	1.5 mils per coat
Maximum	3.0 mils per coat
Theoretical Coverage @ 2 mils DFT	368 sp. Ft./gallon
Drying Time @ 70°F., 50% R.H.	45 minutes – to touch 3 hours – recoat 10 hours – mar free 7 days – maximum hardness
Pot Life @ 70°F., 50% R.H.	6 hours
Primers:	URETHABOND 104, WEARCOAT 499 Primers or URETHABOND 109
Minimum Application Temperature	25°F. or within 10 degrees of dew point
Method of Application:	Brush, roll or spray
Thinner:	CFI-711
Clean Up Solvent:	CFI-704 or CFI-711
Shelf Life, Part A:	2 years if unopened
Part B:	1 year if unopened
Mix Ratio:	Premeasured, varies with color
Induction Time:	None required

Zinc pigmented primers, WEARCOAT 497 and URETHABOND 109 are also recommended for use with URETHABOND 166.

### Application

URETHABOND 166 can be applied immediately after mixing the two components. However, thorough mixing of the two components is important. Mechanical mixing is preferred at slow speed to avoid air entrapment. This coating may be applied by spray (air or airless), brush or roller (close nap) as outlined in CFI Bulletin G-2. If application is by spray method suitable protective vapor/particulate respirators should be worn by all personnel in the area. In poorly ventilated enclosed areas or when airborne concentrations exceed TLV (ceiling) for HDI, a fresh air supplied mask should be worn. In all cases, observe OSHA regulations for respirator use whenever a respirator is used. Also see product MSDS. Spray equipment must be equipped with properly working vapor traps and air supply must be dry.

### Test Data

100 MEK Double Rubs, 48 Hour Cure: Became slightly soft; however, recovers in approximately 10 minutes	
Bend Test:	No loss of adhesion; no cracking at bend 180 degree bend over 1/4" mandrel No loss of adhesion; no cracking at bend
Chemical Resistance	Chemical spot test, 24 hours CONC H2SO4 Coating stripped after 1 hour 75% H3PO4 No effect after 4 hours Coating stripped at 18 hours 37% HCL Slightly soft a 2 hours Coating stripped at 18 hours 20% NAOH No effect after 24 hours MEK Slightly softened at 1 hour Very soft at 18 hours PMA No effect at 4 hours Slightly soft a 24 hours XYLOL No effect at 18 hours Slightly soft a 24 hours

### Precautions

Part B contains aliphatic polyisocyanate prepolymer. When combined with Part A, warning applies to complete mix. Use adequate ventilation. In confined areas, use adequate forced ventilation during application and drying. When spraying, a fresh air mask should be used. Harmful or fatal if swallowed. If swallowed do not induce vomiting. Call physician immediately.

Eye irritant. Wear eye protection. In case of contact with eyes, flush repeatedly with water and contact a physician.

Difficult to remove from skin. Wear gloved and protective clothing. Do not attempt to remove cured coating on skin with solvent; soak in warm, soapy water. Barrier creams are not recommended where possible to cover with protective clothing.

Combustible. Keep away from heat, sparks and open flame. Refer also to material safety data sheet.

**LIMITED WARRANTY :** All statements, technical information and recommendations contained herein are based on tests the manufacturer believes to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, express or implied:

Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective at the time the sealed container is first opened, and in no event beyond the shelf date printed on the label. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith.

All data, statements and recommendations made herein are based upon information manufacturer believes to be reliable, but are made without any representation or guarantee or warranty of accuracy and are made with reservation of all patent rights. All products are sold on the condition that the user will evaluate them, as well as manufacturer's recommendation, to determine their suitability for user's own purpose before adoption. Statements regarding the use of the products or processes are not to be construed as recommendations for their use in violation of any patent rights or in violation of any applicable laws or regulations.