

MARINE INDUSTRIAL COATINGS

TPU-188 DURAPLATE ACRYLIC URETHANE

DESCRIPTION

TPU-188 DURAPLATE ACRYLIC URETHANE is a high quality acrylic polyurethane with quick drying times. TPU-188 has very good exterior gloss and color retention. This type of polyurethane is the most widely used for concrete flooring, product finishing and general maintenance coatings.

PRINCIPAL CHARACTERISTICS

- excellent gloss and color retention
- high hiding
- apply with roller and spray. Touch-up with brush.
- fast dry, fast recoat
- excellent water resistance
- excellent chemical resistance
- excellent resistance to brake and transmission fluids
- use interior and exterior
- excellent hardness, flexibility and impact resistance

COLOR AND GLOSS

Wide range of standard colors are available. Custom colors available on special order. Standard gloss is high. Other gloss ranges are available.

PHYSICAL DATA

DATA VARIES WITH COLOR
(Data below is for Gloss White)

Weight per gallon
Solids content by volume
Recommended dry film thickness
Minimum time before recoating
Maximum time before recoating
Full cure
Flashpoint
VOC (as supplied)
Shelflife (cool & dry storage)
Mix ratio

10 lbs.
51%
2-3 mils
Dry to touch--approx. 30 min.
None
5 days at 75° F
53°F
3.63 lbs./gal
Minimum 12 months in unopened full container.

4 to 1 with 18000 catalyst

COMPLIANCES

Rated "Flammable"

PACKAGING

TPU-188 DURAPLATE ACRYLIC URETHANE is a two package catalyzed system, available in 1 gal cans and 5 gal pails. Both 1 gal cans and the 5 gal pails are filled to capacity. Part A (Base Component), and Part B (Catalyst) are packaged separately. When placing an order, specify 1 gal of Part B (Catalyst) for every 4 gals. of Part A (Base Component).

RECOMMENDED SURFACE PREPARATION

Blast cleaning of steel to SSPC-10 (near white) is recommended. However, when blast cleaning is not practical, nor permitted, power tool or wire brushing to SSPC-SP3 is acceptable and provides excellent results. Bare steel should be primed with a rust inhibiting primer. Our P-12 EPOXY PRIMER provides excellent results and is highly recommended. Other primers are available. For use on aluminum and galvanized, check with us for surface preparation. For concrete, use WT-113 as a prime coat. Follow preparation instructions for the WT-113 Waterbased Epoxy.

INSTRUCTIONS FOR USE

This is a two component system, consisting of 1 gal. of Part B (Catalyst) for every 4 gals. of Part A (Base Component). Part A (Base Component) is pigmented and must be thoroughly mixed before addition of the Catalyst. The two components must be mixed in the ratio of 4 parts of Part A and 1 part of Part B--then mixed thoroughly before application. If the temperature is below 50°F, it may be necessary to add solvents to obtain application viscosity. This results in lower sag resistance, slower cure and thinner films. If thinning is required, add thinner after mixing the components. Very good mechanical mixing of base, catalyst, and thinner is essential.

INDUCTION TIME

None necessary

POT LIFE

6-8 hours to double viscosity at 75°F.

APPLICATION

Application by conventional spray, or airless spray is recommended. May also be applied with brush or roller for touch-up. With AIRLESS SPRAY, hose should be 3/8" I.D., but a 1/4" I.D. whip end section may be used for ease of application. A maximum length of 100 feet is suggested. Best results will be obtained using a 0.018" - 0.021 tip at 2400 - 2700 p.s.i. With CONVENTIONAL SPRAY, fluid hose should be 3/8" I.D. with a maximum length of 50 feet. Pot should have dual regulation and be kept at same level as the spray gun. NOTE--Nylon or Teflon packings are available and are highly recommended. Application by electrostatic spray is also recommended where applicable.

THINNING INSTRUCTIONS

Depends upon application methods. Check with our Technical Department for specific recommendations.

SAFETY PRECAUTIONS

Make certain that all personnel using, handling, or storing, this material have read and understand the applicable Material Safety Data Sheet.

CAUTION

Contains flammable solvents. Keep away from sparks and open flames. Use only grounded explosion proof equipment approved by the National Electrical Code. Workmen must use nonferrous (non-sparking) tools, wear conductive and nonsparking shoes in areas where explosion hazards exist. In confined areas workmen must wear fresh airline type respirators, protective clothing and gloves. Avoid contact with skin, and avoid breathing of vapor and spray mist. KEEP OUT OF REACH OF CHILDREN.

TYPICAL FILM PERFORMANCE PROPERTIES

Film thickness	1.0 to 1.5 dry mils / coat. 2 coats required						
Set to touch	10-30 minutes						
Pot life (double viscosity)	6-8 hours						
Initial gloss							
20°	80						
60°	90						
Hardness							
Pencil	4H						
Konig	100						
Mechanical properties							
Direct impact	30 in.lb.						
Reverse impact	6 in.lb.						
Accelerated weathering							
1500 hrs QUV UVB 313							
20° gloss retention	75%						
60° gloss retention	94%						
South Florida exposure data (45° South, 60° gloss retention)							
Color	Initial	6 mo.	1 yr.	18 mos.	2 yrs.	3 yrs.	
White	89	86	86	81	69	53	
Black	93	91	90	88	87	86	

CHEMICAL RESISTANCE

	3 minutes	1 hour	24 hours
5% sulfuric acid	no effect	no effect	no effect
50% sulfuric acid	no effect	no effect	no effect
5% hydrochloric acid	no effect	no effect	no effect
20% hydrochloric acid	no effect	no effect	softens
5% nitric acid	no effect	no effect	no effect
20% nitric acid	no effect	no effect	blisters
5% sodium hydroxide	no effect	no effect	no effect
50% sodium hydroxide	no effect	no effect	no effect
5% ammonia	no effect	no effect	no effect
Methyl ethyl ketone	sl. soften	softens	blisters
Ethanol	no effect	softens	softens
Xylene	no effect	no effect	softens
Toluene	no effect	sl. soften	softens
Mineral Spirits	no effect	no effect	no effect
1,1-trichlorethane	no effect	no effect	no effect

TRANSPORTATION FLUIDS AND FUELS RESISTANCE

	3 minutes	1 hour	24 hours
Brake fluid	no effect	no effect	soften/discolor
Skydrol	no effect	no effect	dulls
Regular gasoline	no effect	no effect	no effect
Unleaded gasoline	no effect	no effect	no effect
Diesel fuel	no effect	no effect	no effect
Kerosene	no effect	no effect	no effect

*** This coating though resistant, is not a guarantee against tire staining. Vehicular tires from cars, golf carts, trucks, tractors and boat trailers have the potential to leave a brown stain under certain conditions, especially high performance tires. Park on carpet squares or plexi glass pieces to avoid tire staining

LIMITED WARRANTY NOTICE

Every reasonable effort is made to apply Marine-Industrial exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace, or at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund MARINE-INDUSTRIAL PAINT COMPANY, INC. MAKES NO WARRANTY OR GUARANTEE, EXPRESS, OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, AND MARINE-INDUSTRIAL PAINT COMPANY, INC. shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from date of shipment. No claim will be considered without such written notice, or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use our products must bear the signature of the Marine-Industrial Paint Company, Inc. Technical Manager.

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