

Direct-to-Metal POLYASPARTIC

DESCRIPTION

Polyur 102 DTM is a high gloss two-component aliphatic polyaspartic polyurethane. It is used as a high build direct-to-metal (DTM) finish. It offers an excellent gloss and color retention as well as excellent corrosion protection.

FEATURES

- Apply one coat directly to steel
- Excellent gloss and color retention
- Tough hard film
- Excellent abrasion resistance
- Can achieve up to 250 microns (10 mils) wet in a single coat application
- Contains anti-corrosive pigments without heavy metals
- Excellent chemical and corrosion resistance

RECOMMENDED USES

- Original Equipment Manufacturer's (OEM)
- Mobile and agricultural equipment
- Structural steel
- Storage tanks and reservoirs
- Flat beds

TECHNICAL DATA

Colors available:	Available in several colors	Drying times:	
Gloss:	85°+	Dust free:	1 hour
* Solids by volume:	81 % +/- 2 %	To recoat:	2 -3 hours
* Solids by Weight:	88 % +/- 2 %	Hard:	24 hours
Theoretical Coverage of 1 mil:	1,300 ft ² / U.S. gallon	Pot Life:	2 hours
D.F.T. at 25 microns:	120.77 m ² / 3.78 liters	Reduction solvent:	UC – 500 Regular UC – 502 Slow
Recommended D.F.T. mils:	4.0 – 8.0	Dilution:	5 to 10 % by volume (if necessary)
Dry film thickness microns:	100 - 200	Catalyst:	102C
Viscosity:	60-70 ku	Ratio:	3:1
* Specific gravity (part A only):	1.20 – 1.40 kg/lit.	Shelf life:	12 months @ 25°C (77°F) unopened
Flash Point:	4.4°C (39.9°F)	Packaging:	1 gallon kit 4 gallons kit
V.O.C.:	< 100 grs/lit. < 1.25 lbs. / U.S. gal.		
Immerse:	Not recommended		

* Data may vary according to color

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APPLICATION GUIDE

SURFACE PREPARATION:

Remove all grease, oil, salt and dirt in accordance with SSPC – SP – 1 “solvent cleaning” with Polyur 101628 (water-based) or Polyur 101601 (solvent based) or approved equivalency. Remove any loose paint.

For optimum performance adhesion: For direct application on steel: stripped to abrasion according to standard SSPC – SP – 6.

The profile of sanding should be between 37.50 and 62.50 microns (1.5 – 2.5 mils).

After surface preparation, vacuum or remove dust and ensure the surface remains clean before painting.

MIXING AND THINNING:

The entire contents of each container must be mixed well before application. Thinning is not required; however, for brush and roller application, up to 10 % thinner can be added. Mix the two components very well until paint becomes homogenous.

Reduction solvent: UC – 500 thinner or UC – 502 **Catalyst:** 102C

Dilution: 10 % by volume if necessary **Mixing ratio:** 3:1

APPLICATION PROCESS						
RECOATING TIME						
Substrate temperature	Catalyst	Dust free	Hard	Minimum	Maximum	Normal
25°C (77°F)	102C	1 hour	24 hours	2-3 hours	2 months	6 hours

* Scuff sanding is required before recoating. Clean in accordance with SSPC – SP – 1 “solvent cleaning” before recoating.

Brush and roller: For small surfaces only. Use clean synthetic roller ¼ to ½ inch nap.

CONVENTIONAL SPRAY		AIRLESS SPRAY	
Manual Spray gun:	DeVilbiss JGA-510, MBC-510 or equivalent	Pump Ratio:	30:1
Fluid Nozzle:	E Fluid Tip	Pressure:	1500 – 3000 Psi
Air Cap:	704 or 765	Hose:	¾ inch, 50 ft. length maximum
Atomizing Air:	45 – 75 lbs.	Tip Size:	0.015 – 0.019
Fluid Pressure:	15 – 20 lbs.	Filter Size:	50 Mesh (300 um)
Hose:	½ inch, 50 ft. length maximum		

PHYSICAL PROPERTIES

Taber abrasion resistance

(ASTM D – 4060) 1000 cycles, 1000 g load, CS-17 wheel: 109 mg of loss

Cyclic salt fog /UV exposure 2,000 hours (ASTM D-5894)

ASTM D-1654 (scribe) = 10

ASTM D-714 (blister) = 10

* Salt fog resistance (5,000 hours) (ASTM B 117) **VERY GOOD**

* Applied on zinc rich moisture-cure primer

Accelerated weathering (3,000 hours) ASTM D - 4587 **VERY GOOD**

PRODUCT LIMITATIONS

- Surface and temperature must be at 5°C (41°F) minimum
- Humidity and temperature will affect the drying time
- Thinner can be added depending on local VOC and air quality regulations
- Surface temperature must be at 3°C (5°F) above the dew point during application
- 12 months @ 25°C (77°F) unopened

DISCLAIMER:

"The following is made in lieu of all warranties, expressed or implied: Manufacturer's obligation shall be to replace such quantity of the product proven to be defective. The manufacturer shall not be liable for any injury, loss or damage, direct or incidental or consequential, arising out of the use of or the inability to use the product. Before using, the user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith. All values shown are approximations. Values indicated are for guide purposes only, as actual values can change due to application conditions, application methods, environmental conditions etc. The information contained herein is subject to change without notice. Consult your representative for a current data sheet. The foregoing may not be altered except by an agreement signed by the officers of the manufacturer." © Polyval Coatings Inc. Polyur and Polyval are registered trademarks of Polyval Coatings Inc. All Rights Reserved.

Keep in cool and dry area. See the material safety data sheet and product label for complete safety and precaution requirements.

Chemical resistance information is currently being updated according to ASTM standards. Please contact your local representative for an update.