

PU 55 HB DTM Gloss

Polyurethane primer / finish

A two component, high build, solvent based, glossy aliphatic polyurethane primer / finish coat formulated with additional UV stabilizers, new generation adhesion promoters and specialized organic corrosion inhibitor creating outstanding dry film water resistance and corrosion resistance.

Intended Uses:

PU 55 HB DTM is used as a protective coating on metal surfaces and surfaces primed with suitable primers to provide a protective, decorative, aesthetically pleasing finish highly resistant to external weathering.

The cured film provides surfaces with excellent resistance to mild chemicals, salt water, mineral and vegetable oils, paraffins, aliphatic solvents, dilute industrial chemicals, and other aqueous solutions.

Applications Include but Are Not Limited To:

- Metal roof & claddings.
- Structural steel.
- Agricultural, earth moving and construction equipment / machinery.
- Floor coatings and line demarcations.
- Wall coatings.
- Trafficable UV resistant flooring coatings on top of epoxies or polyurethanes.
- Metal furniture & framework.

Properties:

- Highly flexible.
- Fast drying.
- Over-coatable.
- Non-chalking and non-yellowing.
- High abrasion and impact resistant.
- Highly resistant to blistering.
- Excellent adhesion direct to metal and galvanized steel.
- Enhanced corrosion protection on ferrous and non-ferrous metals.
- Highly water resistant, hydrophobic film.
- Salt spray exceeding 712h @ 75um DFT.
- Outstanding gloss retention.

Technical Data:

Colour	RAL, NCS, SABS, metallic, fluorescent, and customizable colours
Finish	Gloss
Mix Ratio (volume) A:B	4 : 1
Activator B	PU Activator 60 AL XL
Density	1.15 Kg/ Litre (Mixed)
Volume Solids	60% +/- 2%
Typical Film Thickness	50 – 80 µm DFT (85 – 130 µm WFT)
Theoretical Coverage	8.0 m ² / Litre at 75 microns DFT, allow loss factors
Method of Application	Conventional or airless spray
Temperature Resistance	Dry continuous – 150°C
Number of Coats	1 – 2 depending on specification

Industrial & Protective: Steel & Concrete Protection - Climatic

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Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product

Issue Date:
01/02/2020

Drying Information:

50 µm DFT						
	-	0°C	10°C	20°C	30°C	40°C
Touch Dry	-	1.5 hrs	1 hr	40 mins	30 mins	15 mins
Hard Dry	-	16 hrs	8 hrs	6 hrs	4 hrs	2 hrs
Full Cure	-	20 days	10 days	7 days	5 days	-
Overcoating Data – See Limitations						
Substrate Temp.	5°C	10°C	15°C	20°C	30°C	40°C
Minimum	-	16 hrs	8 hrs	6 hrs	4 hrs	2 hrs
Maximum	N/A – mechanically prepare surface after 7 days					

Note:

- Colder temperatures will result in longer drying time.
- Drying times measured at 50 µm DFT
- Before over coating, visible surface contamination must be removed by high pressure water cleaning, sweep blasting or mechanical cleaning.

Certifications:

When Used as Part of An Approved System, PU 55 HB DTM Has The Following Certification:

- Salt spray test - 1440 hours.
- Controlled condensation 100% humidity test - 720 hours.
- Accelerated weathering – QUV Testing (i.e. Ultraviolet light alternating with condensation) – 1000 hours

Consult a Specialized Coating Systems technical representative for details.

Surface Preparation:

The performance of this product will depend upon the degree of surface preparation. The surface to be coated must be cleaned and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated dirt. Soluble salts should be removed by freshwater rinsing. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

In all cases the coating should be tested for suitability and if deemed necessary a primer should be applied.

Mild Steel

Mechanically prepare the surface by means of abrasive blast cleaning or coarse sanding to provide a mechanical key for coating. Clean surfaces with **Hydrosolve Degreaser**, rinse thoroughly with clean drinking water and allow to dry.

Galvanized Steel

All steel, new and old should be cleaned with **Galvanized Iron Cleaner** and rinsed thoroughly with water and allowed to dry.

Factory Applied Coil Coatings and Previously Painted Surfaces

Mechanically abrade surfaces with abrasive paper or cup wire brushes. Clean surfaces with **Hydrosolve Degreaser**, rinse thoroughly with clean drinking water and allow to dry.

Application:

Mixing	<p>Material is supplied in two containers as a kit. Always mix a complete kit in the quantities supplied. Once mixed the product should be used within the pot life specified.</p> <p>Stir the base component well with a flat-bottomed paddle or, preferably a mechanical mixer until product is uniform. Continue stirring and add the entire contents of the activator container. Continue stirring until the mixture is homogeneous.</p> <p>Ensure that just sufficient material is mixed so that the product can be applied within its use-able life.</p> <p>The temperature of the mixed product should preferably be above 15°C, otherwise extra solvent may be required to obtain application viscosity.</p> <p>Too much solvent will result in reduced sag resistance.</p>
Pot Life	<p>4 hours at 15°C 3 hours at 20°C 2 hours at 25°C 1 hours at 40°C</p>
Thinner	<p>PU Thinner or Solvent XL (0-30% depending on application. Viscosity can be adjusted using a Ford Cup 4</p> <ul style="list-style-type: none"> • Airless Spray 22 – 25 seconds FC4 • Conventional Spray 18 – 20 seconds FC4
Airless Spray (Recommended)	Tip Range 11 – 17 Thou. Pressure at the tip should not be less than 150 bar (2200 PSI)
Air Spray (Recommended)	Gun: Pressure/Gravity Feed Fluid Tip: 1.2 – 1.6 mm
Brush or Roller (Suitable)	Typically, 50 – 70 microns can be achieved
Work Stoppage	Thoroughly flush all equipment with SA65 Thinners . All unused material should be stored in tightly closed containers. Partially filled containers may show surface skinning and/or a viscosity increase of the material after storage. Material should be filtered, and viscosity re-adjusted before used.
Clean Up	<p>Clean all equipment immediately after use with SA65 Thinners. It is good working practice to periodically flush out the spray equipment during the course of the working day.</p> <p>Frequency of cleaning will depend upon the amount sprayed, temperature and elapsed time, including delays.</p>

Environment:

	Surface Temperature	Ambient Temperature	Relative Humidity
Minimum	5°C*	5°C	No lower limit
Maximum	40°C	45°C	85%

*Or 3°C above the dew point

- PU 55 HB DTM Gloss can be applied at temperatures between 0°C and 10°C, but the curing rate will be very slow.
- Adequate ventilation must be maintained during application and curing.

Pack Size:

Kit Sizes	Part A		Part B*	
	Volume	Pack	Volume	Pack
5 Litres	4 Litres	5 Litres	1 Litre	1 Litre
20 Litre	16 Litres	20 Litres	4 Litres	5 Litres

*Part B – PU Activator 60 AL XL

Storage:

- Shelf Life: Part A - 12 months minimum at 25°C / Part B - 12 months minimum at 25°C (Subject to inspection thereafter).
- Store in dry conditions out of direct sunlight away from source of heat or ignition.

Precautions:

For complete safety and handling information please refer to the appropriate Safety Data Sheets prior to using this product.