# TECHNICAL DATA SHEET UPS 908 MP METAL PRIMER



UPS 908 MP METAL PRIMER is a solvent based epoxy primer, for use on steel and concrete surfaces as a long-term protector against corrosion.

# **Product Information**

## **Product Features**

- Solvent based epoxy coating.
- Suitable for all metallic surfaces.
- 10,000 hours corrosion resistance.
- Cures at temperatures down to 5°C.
- Apply to surface prepared using wire brushes, handheld grinders, hydro-blasting or abrasive blast cleaning.
- Applied in 1 or 2 coats at 100-125 microns per coat.

## **Product Applications**

UPS 908 MP is suitable for priming surfaces, such as;

Cold water lines, Pipework, Structural Steel, External tank surfaces etc.



# Surface Preparation

Blast

Mechanical Abrasion

- 1. All oil and grease must be removed from the surface using an appropriate cleaner such as UPS 9918 MEK Cleaner.
- 2. All surfaces must be mechanically abraded using handheld grinders to abrasive blasting to ISO 8501/4 Standard ST3 (SSPC SP3).
- Once abraded, the surface must be degreased and 3. cleaned using UPS 9918 MEK or similar type material.
- 4. All surfaces must be coated before flash rusting or oxidation occurs.

## Hydro-blasting

- All surfaces need to be hydro-blasted with clean water 1 at 12,000 psi to NACE 5 (SSPC SP13 WJ3-WJ1).
- 2 All surfaces must be coated before flash rusting or oxidation occurs.

# **Abrasive Blast Cleaning**

All oil and grease must be removed from the surface 1. using an appropriate cleaner such as UPS 9918 MEK Cleaner.

- 2 All surfaces must be abrasive blasted to ISO 8501/4 Standard SA2.5 (SSPC SP10 / NACE 2) minimum blast profile of 75 microns (3mil) using an angular abrasive.
- 3. Once blast cleaned, the surface must be degreased and cleaned using UPS 9918 MEK or similar type material
- All surfaces must be coated before flash rusting or 4 oxidation occurs.

PLEASE NOTE: For salt contaminated surfaces the area must be abrasive blast cleaned as above, as well as left for 24 hours to allow any ingrained salts to come to the surface. After the 24-hour period the surface must be washed with UPS 9918 MEK Cleaner prior to brush blasting to remove the surface salts. Repeat this process until all ingrained contaminants have been sweated out of the surface.

## Existing Concrete

- Check the surface for contaminants (such as; oil or 1. grease) and clean using a pressure washer.
- Once concrete is dry, lightly abrasive blast/scarify 2 (taking care not to expose the aggregate).
- 3. Clean all dust and debris from the surface.

# <u>Mixing</u>

- Prior to mixing please ensure the following:
  - The base component is at a temperature between 15-1. 25°C (60-77°F).
  - 2. The ambient & surface temperature is above 5°C (41°F).
  - 3. The ambient & surface temperatures are not less than 3°C (37.4°F) above the dew point.

## Then proceed with mixing the product:

- Transfer the contents of the Activator unit into the 1. Base container
- 2. Mix the components with an electric paddle mixer until a uniform material free of any streaks is achieved.
- 3. From the commencement of mixing the whole material should be used within 2 hours at 20°C (68°F).

# **Application**

Brush or Roller Applications -

- Pour the mixture into a paint kettle or tray.
- Apply a 100mm (4") wide stripe coat to all edges, 2 joints, corners and equipment with a 50mm (2") synthetic brush at a wet thickness at 150microns (6mils).
- 3. Once the stripe coat has cured sufficiently for overcoating, apply the mixed product to all surfaces at 150 microns (6mils) wet thickness.
- Once the 1st coat has cured appropriately, after about 4. 6 hours at (20°C/68°F), apply a 2<sup>nd</sup> coat as before.

# **Technical Data & Performance**

# **Coverage Rates**

5 LTR (1.3 US Gallon) of fully mixed material will give the		
following coverage rates -		
33m <sup>2</sup> at 150 microns	355ft <sup>2</sup> at 6mil	
20 LTR (5.3 US Gallon) of fully mixed material will give		
the following coverage rates -		
133m <sup>2</sup> at 250 microns	1430ft <sup>2</sup> at 6mil	
Please note that the coverage rates quoted are theoretical		
and do not take into consideration the profile or condition of		
the surface being repaired.		

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## **Drying & Cure Times**

At 20°C (68°F) allow the applied materials to harden for the times shown below before subjecting them to the conditions indicated. These times will be extended at lower tomporatures and reduced at higher tomporatures

temperatures and reduced at higher temperatures.		
Useable Life	2 hours	
Minimum overcoating time	6 hours	
Maximum overcoating time	36 hours (72 hours	
	when overcoated with	
	itself of UPS 509 UVST)	

#### Appearance

Base Material Colour	Dark grey liquid
Activator Material Colour	Amber liquid
Mixed Material Colour	Grey liquid

#### **Available Colours**

Dark Grey

#### **Over Coating Times**

Minimum	The applied material can be over coated as
	soon as it is touch dry (approx. 6 hrs)
Maximum	The overcoating time should not exceed 36 hours, unless being overcoated with itself or UPS 509 UVST in which base the maximum overcoating time becomes 72 hours).

Where the maximum over coating time is exceeded, the material should be allowed to harden before being abraded or flash blasted to remove surface contamination.

#### Mixing Ratio

Component	Base	Activator
By Weight	4.5	1
By Volume	3	1

#### Density

Mixed	1.32	
Activator	1.03	
Base	1.32	

## Solids Content

80%

#### **Slump Resistance**

Nill at 150 microns

#### Useable Life

10°C (50°F)	4 hours
20°C (68°F)	2 hours
30°C (86°F)	60 minutes
40°C (104°F)	30 minutes

#### **Minimum Overcoating Tme**

10°C (50°F)	12 hours
20°C (68°F)	6 hours
30°C (86°F)	3 hours
40°C (104°F)	90 minutes

#### Maximum Overcoating Time

10°C (50°F)	72 hours
20°C (68°F)	36 hours
30°C (86°F)	18 hours
40°C (104°F)	9 hours

#### Maximum Overcoating Time with itself or UPS 509 UVST

10°C (50°F)	5 days
20°C (68°F)	72 hours
30°C (86°F)	36 hours
40°C (104°F)	18 hours

# Pack Sizes

5LTR (1.3 US Gallon)

20LTR (5.3 US Gallon)

#### Shelf Life

5 years if unopened and store in normal dry conditions (15-30°C / 60-86°F)

#### Mechanical Properties

mechanical Properties	
Tensile Shear Adhesion	195kg/cm <sup>2</sup>
ASTM D1002	(2770 psi)
(Abrasive Blasted Mild Steel	
with 75 micron profile)	
Salt Fog Resistance	10,000 hours
ASTM B117	
Corrosion Resistance	Minimum 5000 hours
ASTM B117	
Hardness Shore D	80
ASTM D2240	
Humidity Resistance	Unaffected after 5000 hours
ASTM BS3900 Part F2	

#### Heat Resistance

Suitable for use in immersed conditions at temperature up to 40°C (104°F)

Resistant to dry heat up to 120°C (248°F) dependent on load.

#### **Chemical Resistance**

The product demonstrates resistance to a wide variety of		
inorganic acids, alkalis', salts and organic media.		
Chemical Concentration Temperature		
Culmhurin Anid	000/	40%

Sulphuric Acid	20%	40°C
Sodium Hydroxide	35%	40°C
Hydrocholric Acid	10%	40°C
Phosphoric Acid	25%	40°C

## **Global Availability**

UPS 908 MP METAL PRIMER is available from a network of Global Distributors for prompt delivery. For further details and the location of your local distributor, please contact Unique Polymer Systems on:

+44(0) 1531 636300 l sales@uniquepolymersystems.com

#### **Technical Service**

Complete technical assistance is available. Please contact Unique Polymer Systems with your requirements: +44(0) 1531 636300 l sales@uniquepolymersystems.com

The products that we supply are for professional use only, it is your responsibility to read the technical data sheets before you place an order and prior to application of the product.

Quality: All Unique Polymer Systems Products are supplied under the scopes of the company's fully documented quality system.

Warranty: Unique Polymer Systems warrants that the performance of the product supplied will confirm to the typical descriptions quoted within this Technical Data Sheet provided the material is stored correctly and used according to the procedures detailed in the Technical Data Sheet for the material.

Health & Safety: Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves must be worn during the mixing and application of this product. Before mixing and applying the material please ensure you have read the fully detailed Material Safety Data Sheet.

Legal Notice: The data contained within this Technical Data Sheet is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. Unique Polymer Systems accepts no liability arising out of the use of this information or the product described herein.



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