

# TECHNICAL DATA SHEET

## BC 908 MP METAL PRIMER



Industrial Supplier of:

Abrasives  
Adhesives  
Chemicals  
Coatings  
Equipment  
Lubricants  
Sealants  
Silicones  
Tapes

**Bradechem** ISO9001 Registered Firm

**BC 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

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

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



Surface Preparation Manual – Mechanical – Abrasive Blast



Brush or Roller Applied



Cures at Temperatures Down to 5°C



Long Term Protection Against Corrosion

#### Surface Preparation

##### Mechanical Abrasion

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

##### Hydro-blasting

1. All surfaces need to be hydro-blasted with clean water 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

1. All oil and grease must be removed from the surface using an appropriate cleaner such as BC 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 BC 9918 MEK or similar type material.
4. All surfaces must be coated before flash rusting or 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 BC 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

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

#### Mixing

*Prior to mixing please ensure the following:*

1. The base component is at a temperature between 15-25°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:*

1. Transfer the contents of the Activator unit into the 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 -

1. Pour the mixture into a paint kettle or tray.
2. Apply a 100mm (4") wide stripe coat to all edges, 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.
4. Once the 1st coat has cured appropriately, after about 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.*

# TECHNICAL DATA SHEET

## BC 908 MP METAL PRIMER

### 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 temperatures and reduced at higher temperatures.

<b>Useable Life</b>	2 hours
<b>Minimum overcoating time</b>	6 hours
<b>Maximum overcoating time</b>	36 hours

### Appearance

<b>Base Material Colour</b>	Dark grey liquid
<b>Activator Material Colour</b>	Amber liquid
<b>Mixed Material Colour</b>	Grey liquid

### Available Colours

Dark Grey

### Over Coating Times

<b>Minimum</b>	The applied material can be over coated as soon as it is touch dry (approx. 6 hrs)
<b>Maximum</b>	The overcoating time should not exceed 36 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
<b>By Weight</b>	4.5	1
<b>By Volume</b>	4	1

### Density

<b>Mixed</b>	1.12
<b>Activator</b>	1.02
<b>Base</b>	1.15

### Solids Content

85%

### Slump Resistance

Nil at 150 microns

### Useable Life

<b>10°C (50°F)</b>	4 hours
<b>20°C (68°F)</b>	2 hours
<b>30°C (86°F)</b>	60 minutes

### 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

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

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

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 Bradechem LTD Products are supplied under the scopes of the company's fully documented quality system.

**Warranty:** Bradechem LTD 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. Bradechem LTD accepts no liability arising out of the use of this information or the product described herein.