

## PLASMET

## Plasmet HTE

Product reference: 5/05

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Product title: Plasmet HTE

Valid from: 3rd December 2007

Last reviewed: August 2019

### Type

A viscous, solvent free, two or three pack, amine cured epoxy, containing both stainless steel flakes, glass flakes and silicon carbide.

### Suggested use

Areas requiring abrasion (and chemical) resistance. This material has been used in cyclones, chemical process vessels, sugar beet pulping drums etc. It is also useful for building up damaged areas of pump impellers and casings where impact or abrasion are prevalent.

### Limitations

#### Dependent upon environment

Immersed conditions: 275°F (135°C). Non-immersed conditions: 338°F (170°C).

### Health & safety

Before handling or using this product the material safety data sheet should be read and all precautions observed.

### Surface preparation

To obtain optimum adhesion the substrate should be grit blasted to SSPC-SP10 (ISO 8501-1 Sa 2½) or equivalent with 3 mils (75 micron) profile. If grit blasting is not possible, smooth surfaces should be roughened and scored by grinding to give the coating a key. Under these conditions there will be some reduction in adhesion properties. A release agent should be used for any surface to which the coating should not adhere.

### Application equipment

Trowel, putty knife, stiff brush or other suitable implement.

### Application

This material is intended for application at thicknesses between 60 – 240 mils (1.5 to 4mm). It is not normally applied at less than 1mm thickness but can be built up to any desired thickness provided care is taken to avoid pronounced exothermic temperature rises. Material should only be applied when the surface temperature is between 46-104°F (8- 40°C). The surface temperature should be 41°F (5°C) above dew point and humidity below an RH value of 90%. **It is advisable to check for 'amine bloom'**. Where this is suspected by visual appearance or where the environmental and ambient temperatures are outside the above limits. A suitable 'bloom' test kit may be used.

### Mixing ratio

6 parts base to 1 part activator by weight.

### Mixing instructions

Remove lids from both components A-Activator and B-Base and scoop out all of component A putting into component B. Mix thoroughly, ensuring that no unmixed material remains. Remove all mixed material from base tin and remix on a clean flat surface or shallow receptacle. After mixing, the material remains usable for a limited period dependent upon temperature, after which time application becomes difficult. **Mix only sufficient material that can be applied with the limited pot life.**

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### Pot life

Temp °F	68	86	104
Usable time (minutes)	55	20	15

To increase pot life at high ambient temperatures refrigerate material prior to use to a minimum temperature of 50°F (10°C). Gel times will vary depending on temperature and quantity.

### Thinners

**DO NOT THIN.** Any addition of solvent will be detrimental to performance.

### Packaging

1 And 5 gallon kits.

### Storage life

2 years minimum in unopened tins, stored at 41-104°F (5-40°C).

### Color availability

Speckled grey.

### Recommended DFT

As a general lining 2mm, any desired thickness build-up.

### Theoretical spreading rate

40 sf per gal (1m<sup>2</sup>/litre) at 1mm thickness.

### Volume solids

100%.

### Abrasion Resistance

80.8 mg loss/1000 cycles/1000gm load  
(Tabor Abrasion, H18 wheel\*)

### Practical spreading rate

34 sf per gal (0.85m<sup>2</sup>/litre) at 40 mils (1mm) dft

**Note:** This information is given in good faith but may increase dependent upon environment conditions, the geometry and nature of work undertaken, and the skill and care of application. Corrocoat accepts no responsibility for any deviation from these values.

### Specific gravity

1.31 gm<sup>3</sup>, mixed

### Flash point

Greater than 230°F (110°C).

### Activator type

Formulated Amine.

### Mixing ratio

6 to 1 Base to Hardener W/W

### Adhesive strength

Greater than 10 MPa

### Hardness

45 to 50 Barcol.

Typically 40 – 50 depending on application temperature and cure.

### Cure time

24 hours at 68°F (20°C).

Although the cold cured properties of this material are excellent, they may be improved further by post curing. This can be achieved by applying heat at 140-212°F (60-100°C) for periods up to 24 hours at which time maximum possible cure will have been attained. Post cure for shorter periods will also improve the characteristics of this material.

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### Overcoating time

Maximum over-coating time is 12 hours at 68°F (20°C).  
The minimum over-coating time is 1 hour at 68°F (20°C)  
(2mm coating thickness). At different temperatures these  
times will vary, being shorter at higher temperatures and  
longer at lower temperatures. Amine bloom may cause  
intercoat adhesion failure. Refer to 'Application' above.

### Cleaning solvent

Acetone, Methyl Ethyl Ketone, Xylene.

### Chemical resistance

Excellent.

Reviewed 11/2007  
Reviewed 02/2014  
Reviewed 05/2016  
Revised 05/2018  
Revised 06/2019  
Revised 08/2019

All values are approximate. Physical data is based on the product being in good condition before polymerization, correctly catalyzed and full cure being attained. Unless otherwise stated, physical data is based on a test temperature of 68°F (20°C), test results may vary with temperature. Information regarding application of the product is available in the Corrocoat manual. Should further information be required, please consult Corrocoat Technical Services.