



# Product Specification Sheet

## DEP 561

### Thermal Barrier

**DEP 561 Thermal Barrier** is a long usable life high build solvent-free low emissivity coating designed to reduce heat transfer from underlying metal surfaces thereby reducing heat loss and the risk of burns through personal contact. In addition, the coating provides long term protection against corrosion under insulation (CUI). Operating temperature ranges from  $-20^{\circ}\text{C}$  to  $140^{\circ}\text{C}$  (dry). Its long usable life and slow hardening time makes it particularly suitable for application to process equipment when still hot and for spray application.

### Typical applications

The coating of hot pipework, tanks and process vessels to provide corrosion protection, thermal insulation, or safety properties.

### Characteristics

#### Appearance

Base:	Aluminium coloured paste
Activator:	Clear amber liquid
Mixed:	Aluminium coloured thixotropic liquid

#### Mixing Ratio

By weight: 2.5:1  
By volume: 5.5:1

#### Density

Base:	0.45
Activator:	0.95
Mixed:	0.53

#### Volume capacity

1.886 litres /Kg

#### Solids content

100%

#### Sag Resistance

Nil at 3mm

#### Useable Life

$10^{\circ}\text{C}$	3 hours
$20^{\circ}\text{C}$	1.5 hours
$30^{\circ}\text{C}$	45 minutes

#### Coverage

Apply the mixed material onto the prepared surface by brush or squeegee using a practical coverage rate of 0.85 sq metres per litre per 1000 micron coat.

Up to 3 mm can be applied in a single coat. Apply subsequent coats as soon as possible after the underlying coat is touch dry and not in excess of 36 hours. Where the maximum over-coating interval is exceeded, the underlying coat should be allowed to fully harden before being carefully sweep blasted or abraded and cleaned prior to over-coating.

#### Cure Times

At  $20^{\circ}\text{C}$  the applied materials should be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures

and reduced at higher temperatures:

Hard dry	12 hours
Light loading	24 hours
Full loading	7 days
Chemical Contact	10 days

NOTE: Raising the ambient to  $40^{\circ}\text{C}$  for 2 hours after the material become hard dry will enable the material to be put into service for most situations excluding chemical contact.

#### Storage life

5 years if unopened and stored in normal dry conditions ( $15-30^{\circ}\text{C}$ )

### Mechanical Properties

#### Adhesion

Tensile Shear to ASTM D1002

On abrasive blasted mild steel with 75 micron profile  
 $187 \text{ kg/cm}^2$  (2650 psi)

#### Hardness

To ASTM D2240 at  $20^{\circ}\text{C}$   
80 Shore D

#### Lambda Value

0.11W/m.K

#### Corrosion Resistance

To ASTM B117  
Minimum 1000 hours

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### Quality

All DE Polymers Limited products are manufactured under the scope of a fully documented quality system.

### Warranty

DE Polymers Limited warrants that the performance of the product supplied will conform to the typical descriptions quoted within this specification provided material is stored correctly and used according to the procedures detailed in the Technical Data Sheet for the material.

### Health and safety

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

**Legal Notice:** The data contained within this Product Specification 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. DE Polymers Limited accepts no liability arising out of the use of this information or the product described herein.

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