# TEST DATA UPS 225 HT HIGH TEMPERATURE CERAMIC

### <u>UPS 225 HT HIGH TEMPERATURE CERAMIC –</u> TEST DATA

Unique Polymer Systems (UPS) has developed a high temperature resistant coating capable of withstanding continuous immersion in Water and Hydrocarbons up to 130°C. the product is a two-pack solvent free epoxy novolac coating which is applied by brush to abrasive blast cleaned metallic surfaces, minimum Sa2.7, 75-micron profile.

The material is proven to withstand temperatures up to 130°C in continuous immersion in water, steam and oil (dependent on operating environment).

The product is applied a two-coat system, 1st coat at a target WFT if 600 microns and a 2nd coat at a target WFT of 300 microns.



Below we have put together test data which has been collated over the past 12 months. All testing was carried out at the UPS laboratories and should be used as a guide only. For individual application requirements please refer to UPS on sales@uniquepolymersystems.com I +44(0) 1531 636300.

### WATER TESTING

Water Testing at 50°C	No change after 10 months
Water Testing at 90°C	No change after 10 months
Water Testing at 110°C	No change after 10 months
Water Testing at 130°C	No change after 10 months

## **SOLVENT TESTING**

Solvent Testing at 25°C		
Ethylene Glycol	No change after 10 months	
Ethyl Acetate	No change after 10 months	
Methylene Chloride	No change after 10 months	
Toluene	No change after 10 months	
Methyl Ethyl Ketone	No change after 10 months	
Acetone	No change after 10 months	
Solvent Testing at 40°C		
Methyl Ethyl Ketone	No change after 10 months	
Solvent Testing at 75°C		
Toluene	No change after 10 months	
Solvent Testing at 90°C		
Ethylene Glycol	No change after 10 months	

### HYDROCARBON TESTING

Hydrocarbon Testing at 50°C		
Crude Oil	No change after 10 months	
Natural Gas	No change after 10 months	
Hydrocarbon Testing at 110°C		
Crude Oil	No change after 10 months	
Natural Gas	No change after 10 months	

## **ALKALI TESTING**

Alkali Testing at 25°·C		
Sodium Hydroxide 40%	No change after 10 months	
Sodium Hydroxide 20%	No change after 10 months	
Ammonia Solution 25%	No change after 10 months	
Alkali Testing at 90°C		
Sodium Hydroxide 15%	No change after 10 months	

### AMINE TESTING

Amine Testing at 25°C		
Ethanol Amine	No change after 10 months	
Diethanol Amine	No change after 10 months	
Triethanol Amine	No change after 10 months	
Methyl Diethanol Amine	No change after 10 months	
Amine Testing at 90°C		
Ethanol Amine	No change after 10 months	
Diethanol Amine	No change after 10 months	
Triethanol Amine	No change after 10 months	
Methyl Diethanol Amine	No change after 10 months	

#### **Product Applications**

UPS 225 HT High Temperature Ceramic can be used to rebuild damaged or worn surfaces on equipment such as;

- Process vessels
- Chemical storage tanks
- Internal pipe surfaces
- Pump & process systems
- Tube sheets, end covers & water boxes
- Separators, Distillers & Filters

#### Global Availability

UPS 225 HT High Temperature Ceramic 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 I 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

### Official Approvals



USDA complaint for incidental food contact