

## RESICHEM 593 EPOXY AS

Resichem 593 Epoxy A S is an epoxy based coating system suitable for use in areas where a resistance of less than  $10^8$  ohms is required as a measure to control static electricity. After mixing, an easily applied chemical and abrasion resistant finish is produced which is hygienic and easy to clean.

### Typical applications

Factory floors, Laboratories, Clean rooms

### Characteristics

#### Appearance

Base: thixotropic liquid  
Activator: Amber liquid  
Mixed: Thixotropic liquid

#### Mixing Ratio

By weight: 2:1  
By volume: 1.15:1

#### Density

Base: 1.78  
Activator: 1.00  
Mixed: 1.39

#### Solids content

100%

#### Sag Resistance

Nil at 300 microns

#### Coverage

The material should be applied in two coats at a target thickness of 250 microns (10mil) per coat. At 250 microns Resichem 593 Epoxy AS will have a theoretical coverage rate of 4m<sup>2</sup> per ltr per coat.

#### Cure Times

The applied material should be allowed to harden for the times indicated below before being subjected to the conditions indicated:

#### Usable life

10°C 90 minutes  
20°C 45 minutes  
30°C 22 minutes  
40°C 11 minutes

#### Minimum overcoating time

10°C 24 hours  
20°C 12 hours  
30°C 6 hours  
40°C 3 hour

#### Maximum overcoating time

10°C 72 hours  
20°C 36 hours  
30°C 18 hours  
40°C 9 hours

#### Chemical contact

10°C 10 days  
20°C 5 days  
30°C 2.5 days  
40°C 30 hours

#### Storage life

5 years if unopened and stored in normal dry conditions (15-30°C)

### Mechanical Properties

#### Abrasion Resistance

Taber CS17 Wheels/1 Kg load  
138mg loss/1000 cycles  
0.22cc loss/1000 cycles

#### Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile  
160 kg/ cm<sup>2</sup> (2275 psi)

#### Impact Resistance

Tested to ASTM G14  
2.0 joules

#### Compressive strength

Tested to ASTM D 695  
649kg/cm<sup>2</sup> (9200psi)

#### Corrosion Resistance

Tested to ASTM B117  
Minimum 5000 hours

#### Flexural Strength

Tested to ASTM D790  
522kg/cm<sup>2</sup> (7400psi)

#### Surface resistance

Tested to IEC 60079-0:2011 clause 26.13  
2.174 x 10<sup>8</sup> Ohms

#### Hardness

Shore D to ASTM D2240  
80

#### Heat Resistance

Suitable for use in immersed conditions at temperatures up to 60°C. Resistant to dry heat up to 180°C dependent on load.

## Chemical Resistance

The product resists attack by a wide variety of inorganic acids, alkalies, salts and organic media including:

<i>Typical Chemicals</i>	<i>Maximum Temperature</i>
<i>Brine</i>	40°C
<i>Crude Oil</i>	40°C
<i>Diesel</i>	40°C
<i>Hydrochloric Acid 10%</i>	40°C
<i>Naphtha</i>	40°C
<i>Phosphoric Acid 30%</i>	40°C
<i>Sodium Hydroxide 30%</i>	40°C
<i>Sulphuric acid 20%</i>	40°C

For more detailed information refer to the Resimac Technical Centre for advice.

## Quality

All Resimac Products are supplied under the scope of the company's fully documented quality system.

## Warranty

Resimac 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. Resimac accepts no liability arising out of the use of this information or the product described herein.