

# PRODUCT SPECIFICATION SHEET: REPFLO 2205 HTC

## PRODUCT DESCRIPTION

REPLFLO 2205 HTC is designed to protect equipment operating in contact with water, pressurized steam and aqueous hydrocarbon mixtures against erosion/corrosion at elevated temperatures. The coating once fully cured is capable of withstanding temperatures up to 130°C.

## TYPICAL APPLICATIONS

Suitable for the coating of oil and gas processing equipment, condensate extraction pumps, condensate return tanks, calorifiers, distillation units, evaporators, heat exchangers and scrubber units.

## GENERAL PRODUCT INFORMATION

### Appearance

Base: Dark Grey paste  
Activator: Amber Liquid  
Mixed: Grey Viscous liquid

### Mixing Ratio

By weight: 10:1  
By volume: 4:1

### Density

Base: 2.48  
Activator: 0.99  
Mixed: 2.46

### Volume Capacity

459cc/Kg

### Solids content

100%

### Slump Resistance

Nil at 1000 microns

### Coverage Rate

1kg (2.2lb) of fully mixed product will give the following coverage rates –

0.918m<sup>2</sup> at 500 microns    9.86ft<sup>2</sup> at 20mil

0.610m<sup>2</sup> at 750 microns    6.56ft<sup>2</sup> at 30mil

0.459m<sup>2</sup> at 1000 microns    4.93ft<sup>2</sup> at 40mil

*Please note that the coverage rates quoted are theoretical and do not take into consideration the profile or condition of the surface being repaired.*

## HEAT RESISTANCE

### Heat Distortion Temperature (HDT)

Tested to ASTM D648 (264 psi fibre stress), typical values are:

Cure Temperature	HDT
20°C	53°C
100°C	141°C
150°C	172°C

### Heat Resistance

#### Full immersion resistance

Tested water/ hydrocarbon immersion to 130°C  
Pass (no blisters)

#### Steam out resistance

Tested at 220°C 100hrs exposure  
Pass (no blisters)

#### Dry heat resistance

Tested to ASTM D2485  
Pass 240°C

#### Atlas cell testing

NACE TM0714 A  
Tested to ASTM D714 Rating 10  
Tested to ASTM D610 Rating 10

#### Explosive decompression

Tested to NACE TM0185 Pass

#### Thermal cycling

Tested to NACE TM0304 Pass (no blisters)

## CHEMICAL RESISTANCE

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

For more detailed information refer to the Zoom Corrosion Technology Technical department or refer to the Chemical Resistance Chart .

### Storage life

The shelf life of the product is typically 5 years if unopened and stored in cool dry conditions (15-30°C/ 60-86°F°). Once opened replace the lid firmly and store as above

PRODUCT SPECIFICATION SHEET:  
**REPFLO 202 Ceramic Fluid**

**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 70 minutes  
20°C 35 minutes  
30°C 17 minutes

**Minimum Over coating**

10°C 8 hours  
20°C 4 hours  
30°C 2 hour

**Maximum overcoating time**

10°C	24 hours
20°C	24 hours
30°C/ 50% or less humidity	24 hours
30°C/ 50% + humidity	18 hours
40°C/ 50% or less humidity	18 hours
40°C/ 50% + humidity	8 hours

**Full Cure**

10°C 6 days  
20°C 3 days  
30°C 1.5 days

**TECHNICAL SUPPORT**

Zoom Corrosion Technology offer complete technical support and assistance, from discussing application requirements to training approved local contractors. For further information please contact a REPCO representative or your nearest REPCO authorised dealer.

**HEALTH AND SAFETY**

Please refer to the product safety data sheet for detailed information on handling, storage, shipping and disposal.

**Food Contact**

USDA compliant for incidental food contact.

**Approvals**

Approved by BUREAU VERITAS for Surface Protection and Cold Repair Products applied to Marine Vessels.

**MECHANICAL PROPERTIES**

Testing is typically done under laboratory conditions at a temperature of 20°C unless otherwise specified.

**Abrasion Resistance**

Taber H10 Wheels/1 Kg load, wet

85mg loss/1000 cycles  
0.036cc loss/1000 cycles

**Adhesion**

**Tensile Shear** when tested in accordance with ASTM D1002 on abrasive blasted mild steel with a 75 micron profile will typically be:

220kg/cm<sup>2</sup>      3,125 psi      22.2 MPa

**Pull off Adhesion** to ASTM D4541 on abrasive blasted mild steel with 75 micron profile

348kg/ cm<sup>2</sup>      4,950psi

**Compressive strength**

When tested in accordance with ASTM D 695, typical values will be:

1046kg/ cm<sup>2</sup>      14,880psi

**Corrosion Resistance**

When tested in accordance with ASTM B117 the material shows no sign of corrosion after:

Minimum 5000 hours Exposure

**Flexural Strength**

When tested in accordance with ASTM D790 typical values will be:

614kg/cm<sup>2</sup>      8,710psi      60.1 MPa

**Hardness**

**Shore D**

Shore D to ASTM D2240

20°C 89  
100°C 87  
150°C 86  
200°C 82  
240°C 78

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