

PRODUCT DESCRIPTION

REFLO 2206 HTAC is designed to upgrade the performance of conventional materials of construction and in particular to protect equipment operating in contact with acids and highly aggressive chemicals at elevated temperatures. The coating once fully cured is capable of withstanding temperatures up to 90°C (195°F) in continuous immersion in sulphuric acid, hydrochloric acid and phosphoric acid. The material can be applied directly to abrasive blasted steel or to surfaces previously rebuilt with REPCO 1101 Engineering Grade Paste or 2201 Ceramic Paste.

TYPICAL APPLICATIONS

Suitable for coating surfaces suffering from severe erosion, corrosion or abrasion such as:

- Test Separators
- Production Separators
- Scrubber Units
- Knock out Drums
- Distillation Units
- Evaporators
- Condensate Pumps
- Calorifiers

SURFACE PREPARATION

GENERAL

Correct surface preparation is essential for the success of any application. All oil and grease must be removed from the surface of the repair using an appropriate cleaner such as MEK.

STEEL SUBSTRATE

For optimum performance, all steel substrates should be abrasive blasted to ISO 8501/4 Standard SA2.5 (SSPC SP10/NACE 2) and a minimum blast profile of 75 microns using an angular abrasive. Remove all residual blast debris and the surfaces inspected. Profile checks should be taken and recorded. Once blast cleaned, the surface must be degreased and cleaned using MEK or similar type material. All surfaces must be repaired before rusting or oxidation occurs.

PLEASE NOTE: For salt contaminated surfaces the area must be abrasive blast cleaned as mentioned above and left for 24 hours to allow any ingrained salts to come to the surface. After this 24 hour period the surface must be washed with MEK prior to brush blasting to remove the surface salts. This process must be repeated until all ingrained contaminants have been sweated out of the surface.

MIXING AND APPLICATION

PRECAUTIONS

On surfaces already rebuilt with REPCO 1101 Engineering Grade Paste or 2201 Ceramic Paste no further surface preparation is required where over-coating takes place within 3 hours. After this maximum over-coating time has elapsed roughen the surface by flash blasting or other means of abrasion.

Warm the Base component to 15-25°C (60-77°F) before mixing and do not apply when the ambient or substrate temperature is below 10°C (40°F) or less than 3°C (37°F) above the dew point

MIXING and APPLICATION

Only full units of material should be mixed and to aid mixing add only part of the Activator initially. Pour approximately one third of the contents of the Activator unit into the Base container and mix carefully using a spatula. Once the two materials have been blended, add the remainder of the Activator ensuring that as much material is drained from the Activator container as possible. Mix the two components together until they are streak-free and apply using a short bristled brush or applicator tool. The material once fully mixed has an application of time of 30-40mins at 20°C (68°F).

Two Coats

a) The first coat of material should be applied at a target thickness of 600 microns (24mil), use a plastic applicator as a squeegee to apply a **very** thin layer of product, forcing it into the blast profile. Special attention should be paid to detailed areas such as edges, corners and welds where brush application by stippling may be required. Immediately after the initial application apply further material by brush or applicator to give the required film build, checking film thickness with a wet film thickness gauge. Lay off the coating by brush to give a smooth finish.

b) Allow to harden for a minimum of 16 hours before removing any surface bloom by washing first with a detergent and water mixture and then clean water. This should be followed by sweep blasting at reduced pressure using fine grit, and removal of any debris before washing with MEK.

c) The second coat of material should be applied at a target thickness of 300 microns (12mil) using a brush or applicator and once again checking film thickness with a wet film gauge before finally laying off the coating with a brush to give a smooth finish.

TECHNICAL DATA SHEET:

REPFLO 2206 HTAC

Single Coat

If a two coat application is not practical, the product can be applied as in (a) above in a single coat at 650-850 microns (26-34mil). Using this method extreme care is required when carrying out visual inspection of the coating (whilst still wet) to identify any defects which should be corrected.

Once cured any surface bloom should be removed by detergent wash and the coating then wet sponge tested to identify any pin holes. These should be repaired by manually abrading the surface, cleaning down and applying freshly mixed REPFLO 2206 Ceramic HTAC at approximately 250 microns (10mil) thickness to the prepared area.

Coverage Rates

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

1.415m ² at 300 microns	15.0ft ² at 12mil
1.063m ² at 400 microns	11.5ft ² at 16mil
0.850m ² at 500 microns	0.90ft ² at 20mil
0.531m ² at 800 microns	5.70ft ² at 32mil

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

CURE TIMES

At 20°C (68°F) 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:

Temperature	Movement without load or immersion	light loading	Low Temperature Immersion	Hot Water Immersion
10°C/50F°	6 Hours	12 Hrs	4 Days	7 Days
20°C/68F°	3 Hours	6 Hours	1½ Days	3 Days
30°C/86F°	2 Hours	3 Hours	1 Day	2 Days
40°C/104F°	1½ Hours	1 Hours	1 Day	1½ Days

POST CURING FOR OPTIMAL PERFORMANCE

After an initial curing period of at least 4 hours at 20°C (68°F), raising the cure temperature progressively to 60 - 100°C (140-212F°) for up to 8 hours will result in improved mechanical, thermal and chemical resistance properties.

UNIT SIZES

Product is available in the following pack sizes –
1kg (2.2lb), 3kg (6.6lb)

Legal Notice: The data contained within this Technical Data Sheet 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. Zoom Corrosion Technology accepts no liability arising out of the use of this information or the product described herein.

OVERCOATING TIMES

Minimum – further material can be applied as soon as the first layer is touch dry.

Maximum – regardless of temperature the over-coating time should not exceed 3 hours.

COLOUR

Mixed Material	Dark Grey/Light Grey
Base Component	Dark Grey/Light Grey
Activator Component	Amber Liquid

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.

TECHNICAL DATA

Volume Capacity	425cc/Kg
Compressive Strength ASTM D695	938kg/ cm ² (13,960)
Tensile Shear Adhesion ASTM D1002	220kg/cm ² (3,125psi)
Flexural Strength ASTM D790	614kg/cm ² 8,710psi
Hardness Shore D ASTM D2240	89
Corrosion Resistance (ASTM B117)	5000 hours

ADDITIONAL TECHNICAL DATA

Please see the REPFLO 2206 HTAC Product Specification Sheet for further technical and performance data.

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.

Repcoproducts are manufactured for:
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