

MR 2006

Technical Data Sheet

Description

MR 2006 is a two component solvent free epoxy metal repair compound.

Composition

MR 2006 is formulated on a complex range of epoxy resins combined with a polyamino curing system reinforced with a phosphor steel alloy to enhance the corrosion and chemical resistance of the whole system.

Recommended Applications

MR 2006 can be applied to any damaged component in one easy application and is ideal for repairing:

- Damaged flanges
- O-ring seats
- Pitting corrosion of steel surfaces
- Pumps or valves

Features

- Resistant to abrasion
- Suitable as compensation- and sinkhole filling
- Compatible with other systems

Resistance

Tested at +21 °C. Samples cured for 12 days at +25 °C. Longer curing improves chemical resistance.

Acids:

5 % Acetic acid	2
10 % Acetic acid	4
10 % Hydrochloric acid	1
20 % Hydrochloric acid	2
36 % Hydrochloric acid	3
10 % Sulphuric acid	1
30 % Sulphuric acid	1
50 % Sulphuric acid	2
70 % Sulphuric acid	3

Other Compounds:

Isopropanol	1
Kerosene	1
Naphtha	1
Salt water	1
Sewage	1
Toluol	1
Xylene	1

Leach and Bleeding:

10 % Ammonia	1
25 % Ammonia	1
10 % Caustic soda hydrated	1
30 % Caustic soda hydrated	1

Legend:
1 = resistant
2 = short-term resistant 40 days
3 = over-flow-resistant, immediate cleaning recommended

Due to the reason that the resistance of the coating can be affected by various factors (medium, temperature, concentration, layer thickness etc.) we recommend to consult us prior to the application.

Technical data			
Hardness Rockwell R		100	
Density	ASTM D 792	2,46	g/cm ³
Compressive strength	ASTM D 695	107,5	N/mm ²
Temperature resistance	dry heat	+200	°C
	intermittent wet heat	+120	°C
	immersion	+70	°C
Volume capacity		406	cc/kg
Volume solids		100	%
Tensile shear adhesion	ASTM D 1002	185	kg/cm ²
Flexural strength	ASTM D 790	703	kg/cm ²

Surface Preparation

Appropriate surface preparation is essential in order to obtain good results with this product. The exact requirements change according to kind of application, expected serviceable life and the original status of the surface.

Steel

Surface preparation by blasting according the DIN standard DIN EN ISO 12944-3 and -4 as well as DIN EN 14879-1

Surface preparation methods

DIN EN ISO 8504-2 Abrasive blast cleaning

Preparation of steel substrates before application of paints and related products

DIN EN ISO 8501-1 Preparation grade Sa 2½

DIN EN ISO 8501-2 Visual assessment of surface cleanliness

DIN EN ISO 8501-3 Preparation of grade welds, edges, etc., table 1 P3

Test for the assessment of surface cleanliness

DIN EN ISO 8502-4 Dew Point

Optional:

DIN EN ISO 8502-3 Assessment of dust, quantity <2, size <2

DIN EN ISO 8502-6 Bresle method

Surface roughness characteristics of blast-cleaned steel substrates

DIN EN ISO 8503-1 Ry5 (Rz) 40 - 100 µm

For the preparation of other surfaces, kindly contact us.

Preparation of Material

Warm the Base component to +15-25 °C before mixing. Mixing of the product can be on full units or by part-mixing. If mixing the whole unit please ensure as much of the base and activator is dispensed from the plastic container onto a clean plastic mixing surface and mix using a spatula until a uniform material free of any streakiness is achieved while ensuring no unmixed material is left on the spatula or the mixing surface. From the commencement of mixing the whole of the material should be used within 25-30 minutes at +20 °C.

Mixing ratio 100 : 20 (5 : 1) part by weight
(Part A : B)

Application Instructions

Conditions of object:

Temperature of substrate and air no less than +5 °C, relative air humidity max. 85 %; temperature of the surface to be coated has to be at least +3 °C over the respective dew-point. Low temperatures delay curing and aggravate treatment. Higher air humidity as well as falling below dew-point may result in formation of condense humidity on subsoil respectively coating surface, this possibly causing severe impairment in adhesion. The conditions of object have to be observed during treatment and curing time. When close to these limits, the use of heaters or drying apparatus is recommended.

Pot life in minutes:

	+20 °C
1.0 kg	20 - 25

This schedule states the practical curing time from beginning of mixing.

Composition of Coating/ Material Consumption

MR 2006 can be applied with a minimum stratum thickness of 1 mm

Re-coating Intervals/Sequence Coatings

At the earliest touch-dry max. after 3 hours.

MR 2006 is re-coatable with itself or with other polymer copounds.

Surfaces have to be clean, dry, free from oil and grease. When exceeding the interval times, surfaces have to be roughened.

The re-coating interval shortens strongly through sun influence. Appropriate safety measures must be taken.

Curing Time

	+20 °C
Initial set:	60 min
Machining:	2 h
Full mechanical load:	2 days

The above mentioned values are standard values. Variations caused by practical requirements or conditions are possible.

Packing Units

The material is supplied in the following packing size:

1.0 kg (0.833 kg Part A and 0.167 kg Part B)

Delivery in colour grey.

Cleaning

All tools should be cleaned using industrial solvents acetone, alcohol, methylethylketone) before the material hardens. If the material is allowed to set, it can only be removed by mechanical means.

Storage

The material should ideally be stored in unopened original bins under cool and dry conditions, at temperatures between +15 °C and +30 °C, divergence during transport is acceptable. Please observe the expiry date stated on the material.

Safety Instructions

For the handling of our products, the significant physical, safety-related, toxicological and ecological data according the substance-specific safety data sheet are to be extracted. The applicable rules and regulations, such as for example the Hazardous Substances Regulation, have to be observed.

A detailed safety data sheet will be delivered with the material or is available upon request.