



Mapewall I

**Two-component
solvent free epoxy
paint for walls**



AREA OF USE

Mapewall I is used as epoxy paint for walls and ceilings.

Mapewall I is suitable for use within industry buildings, purification plants, agricultural buildings etc.

Mapewall I is suitable for use in pools and cisterns.

Mapewall I is normally applied on concrete and other cement- based substrates.

TECHNICAL CHARACTERISTICS

Mapewall I is a wear resistant epoxy for concrete walls, ceilings etc.

Mapewall I provides chemically resistant, hard, smooth surface that is easy to clean.

Mapewall I is delivered in colors shown in the provided color guide.

Mapewall I complies with the principles defined in EN 1504-9 standards ("Products and systems for protecting and repairing concrete structures. Definitions, requirements, quality control and conformity assessment. General principles for the use and application of systems"), and the requirements of EN 1504-2 ("Protection systems for concrete surfaces") for class: products for protecting surfaces - coating (C) – CR.

APPLICATION PROCEDURE

Preparation of the substrate:

The concrete must be sound, clean and dust-free with a smooth permanent surface. Normal cleaning methods such as milling, grinding or shot blasting can be used. The substrate's surface temperature should be at least +10 °C and at least 3 °C above the applicable dew point during product application.

Preparation of the product:

Components A and B should have a temperature of +15 °C or more when mixed together. Component B is poured into component A and mixed with a drill whisk at slow speed for approximately 3 minutes until the product is completely homogenous.

Be sure to mix well the bottom and sides of the container.

The product must not be thinned!

Application of the product:

Used as a smooth epoxy paint:

a. Intermediate layer (optional)

Apply epoxy/cement-based mortar **Mapepoxy Cem-S** as an intermediate layer in approx. 1.5 -2 mm thickness to level and to fill the pores in the concrete surface. Spread and smooth the material onto the prepared surface using basic mason's tools, steel trowel, steel float.

Mapewall I: Two-component solvent free epoxy paint for walls. The product complies with specification in EN 1504-2 Coating (C) principles: CR

TECHNICAL DATA (typical values)

PRODUCT DETAILS		Component A	Component B
Color:		colored	straw colored
Appearance:		dense liquid	liquid
Density (g/cm ³):		1.26	1.05
Brookfield viscosity at + 23 C (mP *as):		approx. 27 000	approx. 440
APPLICATION DATA			
Mixing ratio:		75:25 component A: component B	
Color of mixture:		colored	
Consistency of the mixture:		dense liquid	
Density of the mixture (kg/m ³):		1 200	
Brookfield viscosity of the mixture (mPA*s):		approx. 7 500	
Application temperature range:		+10°C - 30°C	
Potlife (EN 9514):		27 minutes	
FINAL PROPERTIES (7 days at + 23 and 50 % R.H)			
Drying time (BYK drying recorder):		18 hours	
Final setting time:		7 days	
Shore D (ISO 868:2003):		approx. 75	
Performance characteristics for product or system	Test methods	Requirements according to EN 1504-2	Product or system performance
Capillary absorption and permeability to water:	EN 1062-3	w < 0,1 kg/m ² *h ^{0,5}	w < 0,01 kg/m ² *h ^{0,5}
Resistance to severe chemical attack Class I: 3 days with no pressure Class II: 28 days with no pressure Class III: 28 days with pressure We recommend using test liquids for the 20 classes indicated in EN 13529, which covers the most common chemical agents. Other test liquids may be agreed upon between those interested in the tests:	EN 13529	Reduction of hardness less than 50% when measured according to the Buchholz method, EN ISO 2815 or the Shore method (EN ISO 868), 24 hours after removing the coating material from immersion in the test liquid.	Petrol: Class II; Mix (48% MeOH, 48% Isopropanol, 4% H ₂ O): Class I; Formaldehyde: Class II; Acetic acid (10%): Class II; Sulphuric acid (70%): Class II; NaOH (30%): Class II;
Pull-off test Reference substrate: MC (0.40) as specified in EN 1766, curing time 7 days:	EN 1542	Average (N/mm ²) Crack-bridging or flexible systems with no traffic: ≥ 0.8 (0.5) with traffic: ≥ 1.5 (1.0) Rigid systems with no traffic: ≥ 1.0 (0.7) with traffic: ≥ 2.0 (1.0)	> 4.4 N/mm ²

b. Primers

The surface should always be cleaned and prepared with a primer (such as **Mapeprimer M**) before applying **Mapewall I**. The primer is best applied using a roller on the wall – after application the surface should appear to be sealed without any apparent dry spots.

Please take notice on recoatability (48 hours for **Mapeprimer M** at 20 °C). If this time is exceeded the primer should be grinded and/or a new layer of primer should be applied.

c. Coatings

Mapewall I should be applied using a roller or brush in at least two coats depending on the substrate and the intended thickness.

Please take notice on recoatability (24 hours at 20 °C). If this time is exceeded the surface should be grinded and/or a new layer of primer should be applied.

PLEASE NOTE!

If the product is applied in areas with a high concentration of CO₂, high moisture and/or temperatures less than 3 degrees above dew point, this might lead to a sticky and discoloured surface. Before any further treatment, this must be removed and the surface must be recoated.

CLEANING

Tools and equipment must be washed immediately after use with **Spesialtynner**, ethanol or other cleaning agent suited for epoxy. Once hardened the product can only be removed mechanically.

CONSUMPTION

Used as a smooth epoxy paint approximately 0.3-0.5 kg/m² per coat.

Consumption is dependant of on the temperature and the substrate's coarseness and absorption.

PACKAGING

4 kg set: Component A = 3 kg,
component B = 1 kg

12 kg set: Component A = 9 kg,
component B = 3 kg

STORAGE

Properties for use are not changed for a period of 24 months when stored between + 5 and + 30 °C in unopened original packaging.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapewall I part A is irritating to eyes and skin. May cause sensitization by skin contact. When applying the product, it is recommended to wear protective clothing, gloves and safety goggles.

Mapewall I part B is corrosive and may cause severe burns. It is also harmful by inhalation, in contact with skin and if swallowed. May cause sensitization by skin contact. Possible risk of impaired fertility. When applying the product we recommend wearing protective clothing, gloves, safety goggles, suitable respiratory protection, and to work only in well ventilated areas. If the product comes in contact with eyes or skin wash immediately with plenty of water and seek medical attention.

Mapewall I part A and B is harmful to aquatic life. Avoid release to the environment. For further and complete information about use of the product please refer to the latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE!

NOTE

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

**All relevant references
for the product are available
upon request and from
www.mapei.com**



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EN 1504-2:2004

MAPEWALL I

Intended to be used as surface protection products – coating

6.1 Chemical resistance

Capillary absorption and permeability to water	$w < 0.01 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
Resistance to severe chemical attack	Petrol: Class II; Mix (48% MeOH, 48% Isopropanol, 4% H ₂ O): Class I; Formaldehyde: Class II; Acetic acid (10%): Class II Sulphuric acid (70%): Class II, NaOH (30%): Class II;
Adhesion strength by pull off test	$>1.0 (0.7) \text{ N/mm}^2$
Reaction to fire	F
Dangerous substances	NPD



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