

## PRODUCT INFORMATION

### **EARTH BINDER**

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Manufacturer's Code: RPEBR

Updated: 01/01/2022

Product Name: EARTH BINDER

Description: EARTH BINDER is an acrylic-based sealer used to dust-seal and strengthen the internal or external surfaces of earth structures. The product penetrates the capillaries of earth substrate surfaces providing the substrate with a dust-sealing effect and surface abrasion resistance. The treatment will not significantly change the surface appearance and the vapour permeability of the earth buildings. However, a slight sheen or darkening of the surface may occur for some earth structures.

Recommended Uses: EARTH BINDER is recommended for dust-sealing the internal or external surfaces of earth buildings or other porous masonry substrates. It can also be used as a primer before rendering for earth buildings or other porous substrates, to strengthen the surface and to improve the adhesion of the render. Some of the important features of EARTH BINDER include:

- Water-based non-toxic formulation.
- Penetrates into the masonry substrate surface with no peel or blister.
- Provides dust-sealing and surface abrasion resistant effects.
- Does not significantly change the surface appearance and vapour permeability.
- Improves strength and adhesion of earth substrates before rendering.
- Easy application and cost effective.

Use Instructions: Before application

The surface to be treated should be dry, firm and free from grime, oil and any previous coatings/sealers. All cracks should be properly filled and allowed to cure before application. Do not apply if rain or extreme weather conditions are expected and/or the temperature is below 10°C. Opalescent (milky) appearance may occur if the temperature is below 10°C or if the fresh coating film is in contact with water during application and drying. Close the container as soon as possible so the remaining sealer within the container avoids possible skin formation.

#### Application

1. The EARTH BINDER (EBR) should be stirred before use.
2. EBR should be diluted with clean tap water at a range of 1 part EBR to 3 parts water (or up to 9 parts water) before use. The dilution ratio should be determined by pilot testing in a small area to obtain the desired surface finish.
3. The above diluted sealer should be applied by low pressure spray equipment or with a thick nap roller. The emulsion should soak into the earth surface leaving the wall with a matt wet appearance. On drying, there should be little discernible colour change. It is advisable to apply the sealer on a sample surface to ascertain the degree of binding and surface appearance achieved. If necessary, alter the dilution ratio to attain optimum results.
4. The number of coats depends on the permeability of the substrate. Two coats are generally recommended. However, for very permeable substrates, more coats may be required. Allow the sealer to dry before further coats.
5. Avoid any excessive accumulation of the sealer, which may cause an uneven finish.
6. Do not spray the product onto any area you do not wish to treat. If splashing occurs the product should be removed with a damp cloth before the sealer dries.

Consumption rate

The consumption of EARTH BINDER varies significantly depending on the permeability of the substrate and the degree of dust-sealing effect required. For dust-sealing, it may be of the order of 1-10 m<sup>2</sup> per litre of diluted emulsion per coat or could be outside of this range significantly.

After application

Coating may take 24 hours or up to 7 days to dry. Avoid heavy traffic or any staining for at least 24 hours. Clean equipment with water.

Pilot testing and quality control

Due to the variation of building materials, it is strongly recommended that a pilot test on a small area on site should be conducted prior to application to determine the dilution ratio and to find out the suitability of this product for the purpose.

Typical Data:	Appearance:	Milky white emulsion
	Solids content:	50% by weight
	Specific Gravity:	1.05g/ml at 20 oC
	pH value:	8-9
	Solubility in water:	Soluble in water
	VOC content:	Nil
	Flash point:	Not allocated

**Important Note:** EARTH BINDER penetrates into the capillaries and also forms a thin film over the masonry surface while still leaving most of the capillaries open to allow water vapour to pass through. The dust-sealing and surface abrasion resistance of the substrate treated with EARTH BINDER is limited and therefore, harsh cleaning, extreme weathering, hard wearing and heavy traffic may have a detrimental effect resulting in significantly reducing the durability of the sealer.

EARTH BINDER is not formulated as a water-proof sealer and therefore it should not be used for the water-proofing of earth buildings.

**Handling & Storage:** EARTH BINDER is a non-hazardous material. However, as with all chemical products, good industrial hygiene procedures should be followed when using this product. Vapour inhalation and skin or eye contact should be avoided by wearing proper protection. Wash hands after handling. The product should be stored in closed containers in a cool dry place away from any fire and ignition sources. The product has a shelf life of 12 months in a sealed original container under 25oC.

**Use with sufficient ventilation!**

**Keep out of reach of children!**

**Packaging:** EARTH BINDER is available in 5 and 20 litre plastic drums. Other size containers are available on request.

**Disclaimer:**

The information given in this data sheet is based on many years of experience and is correct to the best of our knowledge. As the storage, handling and application of this material is beyond our control; we can only be responsible for the quality of our product at the time of dispatch. We reserve the right to alter certain product parameters within the spectrum of properties in order to keep abreast of technical advances. It is the responsibility of the end user to determine the suitability of this material for any particular application.