TECH-DRY BUILDING PROTECTION SYSTEMS PTY. LTD.
ABN 62 922 836 289
177-179 Coventry Street,
South Melbourne, Victoria, 3205, Australia
Telephone: 61 3 9699 8202 (all hours)
Facsimile: 61 3 9696 3362
Website: www.techdry.com.au
E-mail: info@techdry.com.au

PRODUCT INFORMATION

Manufacturer's code: RPGPE50B **Updated:** 01/01/2008

Product Name: EMULSION GPE50B

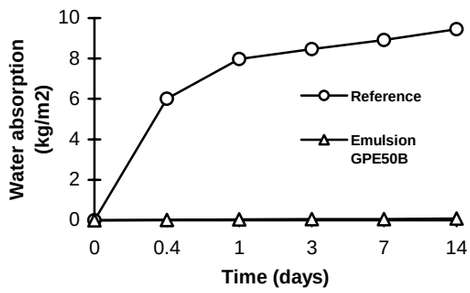
Description: EMULSION GPE50B is a solvent-free aqueous silane/siloxane emulsion concentrate with an enhanced surface beading effect. It is designed to replace general purpose solvent-based silane/siloxane masonry water repellents. The silane/siloxane reacts with masonry substrates providing permanent water repellency to the masonry.

Recommended Uses: As impregnation of masonry:

When diluted with water, EMULSION GPE50B is recommended for the water repellent treatment of almost all masonry substrates including concrete masonry, cement mortar or renders, clay bricks, terra cotta tiles and natural stones such as sandstone, limestone and slate etc.

Figure 1 shows long term water absorption results for clay brick treated with 5% (active silicones) GPE50B emulsion. The water absorption of the treated brick compared to that of the reference was significantly reduced.

Figure 1. Water Absorption of Treated Brick

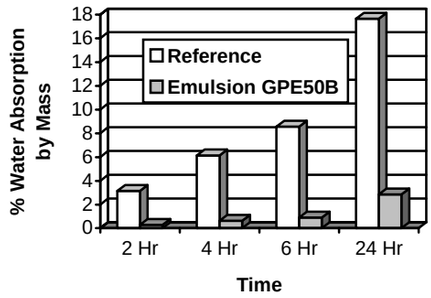


As an admixture in acrylic primers:

EMULSION GPE50B can be added to acrylic primers to produce products that are film-forming impregnants. Such products possess both film forming and penetrating properties. The result is a coating combination with very low water absorption. Acrylic primers containing EMULSION GPE50B form superior substrates for subsequent over coating. The low water absorption of the primer coat reduces water ingress through imperfections or damage in the topcoat; the result is a more durable coating system.

The water absorption test results show that acrylic primer with addition of 6% EMULSION GPE50B provides 85% reduction in water absorption compared to that of the reference of standard cement render as shown in Figure 2.

Figure 2. Water absorption of cement render coated with acrylic primer containing Emulsion GPE50B



Use Instructions: As masonry water repellent

A working solution of EMULSION GPE50B can be prepared by diluting the EMULSION GPE50B with demineralised water to an active content of 5% (or 1:9 dilution). Concentration may change depending on application. A test should be conducted before application. Stir EMULSION GPE50B before dilution. Such a diluted solution should be stable for at least 6 months.

The above solution can be applied to masonry surface by brush, roller or sprayer. A garden sprayer or low pressure airless sprayer is preferred. One or two flood coats may be required depending on application. If two coats are required, the second coat should be applied immediately after the first coat is absorbed by the surface. This is called wet-on-wet application. This is to avoid possible poor spreading of the second coat caused by the good beading effect after the first coat dries. This may result in difficulty for the 2nd application or cause an uneven surface finish. Always stir the solution before use.

As an admixture in acrylic primers

An acrylic primer can be prepared according to the following formula:

Duramul D641 (acrylic emulsion from Rhodia):	300kg
Texinol (Coalescing agent)	18kg
EMULSION GPE50B:	60kg
Water:	640kg

Duramul D641 is added to deionised water with stirring followed by adding a coalescing agent and other additives such as defoamer and biocide. Emulsion GPE50B is then stirred into the above mixture. Stir EMULSION GPE50B before addition.

Typical Data:

Appearance:	Milky white liquid with slight odour
Solids content:	50% by weight
Specific gravity:	0.98
pH value:	8-9
Solubility in water:	Miscible
Flash point:	>100^{o}C

Important Note: As products and the conditions of use vary, it is always recommended that a pilot trial should be carried out prior to using EMULSION GPE50B to determine the suitability of this product for the purpose.

Handling & Storage: EMULSION GPE50B is classified as a non-hazardous material according to the criteria of Worksafe Australia. However, as with all chemical products, good industrial hygiene procedures should be followed when using this product. The product should be stored in closed containers in a cool dry place away from any ignition sources. The product has a shelf life of 12 months in a sealed container stored at a temperature below 25^{o}C.

Packaging: EMULSION GPE50B is available in 20 and 200 litre plastic drums or a 1,000 litre plastic bulky bin. Other size containers may be available on request.

Disclaimer: