

Mulsifix

SBR admixture and bonding

Latex

aid for cemenitious mixes

mf. Latex

About this product

Mulsifix Latex is a water based dispersion of SBR polymer which has been specially formulated to meet the requirements of the Building and Construction industry.

Incorporation of Mulsifix Latex into cementitious mixes improves the overall performance of the final product with respect to strength, adhesion and durability. In use the Latex is blended with cement and suitable aggregates so that a reinforcing polymer is deposited in the micro-voids normally found in cementitious products. By carefully varying the proportions of Latex, cement, sand and water, a whole range of useful bonding slurries, adhesives and mortars are produced. Mulsifix Latex has a successful site history in the repair of concrete and stonework, in floor toppings and brick and tile adhesive beds. Mulsifix Latex in fully cured cementitious mixes is non-toxic.

Features and benefits

- Improved tensile, flexural and compressive strength.
- Excellent adhesion characteristics.
- Improved chemical resistance.
- Increased resistance to water and water vapour penetration.
- Improved resistance to freeze/thaw.
- · Reduced shrinkage and shrinkage cracking.
- Improved workability.

Typical properties

Specific Gravity: 1.02 at 20°C

Cements: Can be used with all types of cement.

Test results

	Strengths:		No Mulsifix	With Mulsifix
	Compressive	3 days	42 N/mm ²	47 N/mm ²
		7 days	44 N/mm ²	53 N/mm ²
-		28 days	53.5 N/mm ²	61 N/mm ²
	Flexural	7 days	6 N/MM ²	7 N/mm ²
		28 days	7.5N/mm ²	8.5 N/mm ²
	Tensile	7 days	no test	4 N/mm ²
	Adhesion: Slant shear— Water resistance: Initial surface absorption BS 1881	28 days	no test	5 Nmm ²
		28 days	2 N/mm²	28.5 N/mm²
		10 min	0.21 ml/m ²	0 ml/m²
		30 min	0.07 ml/m ²	0 ml/m ²
		1 hour	0.05 ml/m ²	0 ml/m ²
		2 hours	0.04 ml/m ²	0 ml/m ²

Chemical resistance

Mulsifix Latex mixes have better resistance to mild chemicals than normal sand/cement, but in situations subject to attack, particularly from acids, epoxy resin systems are recommended. Please contact our sales Department for further information.

Application

Surface preparation

a) Concrete

Concrete substrates must be adequately prepared either by a suitable mechanical method such as scabbling, grit blasting or needle gunning, or by such other means as appropriate. Concrete bases for toppings must be carefully prepared to give a clean freshly exposed surface.

Old concrete surfaces contaminated with oil or grease require suitable preparation such as steam cleaning in

conjunction with a suitable detergent. Care must be taken to ensure that the oil or grease is removed from the and not simply spread over a larger area. New should be cured for at least 14 days using an curing technique e.g. polythene film. Spray-on membranes are unsuitable for use on substrates where Mulsifix Latex mixes are to be applied.

b) Steel

Steel reinforcement should be degreased with a suitable solvent or degreaser, followed by a grit blasting treatment to Swedish Standard Spec SA21/2 immediately prior to bonding. However, in many instances where chloride induced corrosion is absent, wire brushing to a clean bright surface may be adequate.

Mixes

1. Slurry bondcoat

Surfaces must be thoroughly dampened prior to application and excess water removed.

Using approximately two volumes of cement and one volume of Mulsifix Latex, mix to a smooth, creamy consistency, adding extra water if required (up to 1 volume). mixed material has a workable life of 1-2 hours in the bucket depending on temperature and type of cement. Apply by stiff brush or broom working it well into the surface. Under no circumstances must the slurry be allowed to dry before the new mortar is placed. If large areas of topping are to be laid, the slurry should be applied just in advance of laying. If the Slurry Bondcoat does dry it should be mechanically removed and the repair procedure restarted

AGE INDUSTRIES & TRADING SDN BHD

Mulsifix

Latex mf. Latex

2. Tile, mosaic and brick slip adhesive

A water resistant adhesive suitable for areas such as swimming pools, showers etc. where tiling is continually subjected to water splashes can be prepared from one of

	Thin Bed	Thick Bed
	up to 3mm	up to 6mm
Cement	50 kg	50 kg
Clean fine sand (Washed and dry: max. size 1 mm)	50 kg	500 kg
Mulsifix Latex	10 litres	15 litres
Clean water (approx.)	5 litres	5 litres
Approximate yield	50 litres	80 litres

First blend 5 litres of clean water with the Latex then add the cement and sand. A little water can be added to bring the mix to the right consistency but do not over water.

Apply to the substrate spreading to the desired thickness with a float. For thin bed application rib with a tiler's notched trowel to produce ribs 6mm square at 25mm centres then press the tile on to the adhesive and ensure good contact (80%) on the back of the tile. For thick bed applications press the tiles straight on to the spread adhesive and bed down with a wooden float. Tiles can be buttered with the

press the tiles straight on to the spread adhesive and bed down with a wooden float. Tiles can be buttered with the adhesive 3mm thick if this method of application is preferred. Do not wet tiles or substrate. Leave 24 hours to set hard. Grouting may be done using a thin bed mix but wipe any excess off the tiles before it sets.

3. Concrete repair and bedding mortar, screed render

A water resistant mortar for concrete repairs, the bedding of bricks and tiles and rendering can be produced from the following mix:

Cement	50kg
Dry clean sharp sand (BS 882 Grade M)	125kg
Mulsifix Latex Std	10 litres
Clean water 6 to 10 litres to give workability	
Approximate yield	87 litres

First blend the water with the Latex and then mix in the cement and sand. A minimum water should be added to bring the mix to the right consistency. Concrete repairs can be effected to floors, walls and soffits. On vertical and overhead applications it is essential to build up in layer approx. 6mm thick. All surfaces should be primed with Slurry Bondcoat. The minimum thickness for repair and to cover steel reinforcement is 12mm. For thinner sections use Epoxy Resin Mortars. Where it is necessary to blend in around edges "toeing in" is recommended (i.e. cutting back to increase thickness). The bedding of bricks and floor tiles can be achieved with a thickness of 6mm.

A water resistant render is also produced from this mix. Apply one coat of Slurry Boadcoat and whilst still tacky apply the render at 6-12mm thick in one or two applications. This mix can also be used for a hard wearing floor screed resistant to water but the Heavy Duty Floor Topping specified below is more economical.

4. Heavy duty floor topping

Mulsifix Latex may be incorporated into screeds or granolithic toppings suitable for industrial use, e.g. food processing factories, bottling plants, garages, aircraft hangers, car parks, etc.

Recommended mix:	
Cement	50kg
Dry clean sharp sand (BS 882 Grade M)	65kg
Dry granite or similar chippings (Size 3mm)	65kç
Mulsifix Latex	10 litre
Water 6 to 10 litre to give workability	
Approximate yield	89 litre

First blend the water with the Latex then add the cement, sand and chippings. A forced action mixer, e.g. Creteangle, recommended. The topping should be laid on to a single coat application of Slurry Boadcoat which is still tacky. The recommended thickness is 12-15mm. The mix may appear dry but when compacted and finished with a steel float the surface should close up without giving a heavy skin. A trial recommended before commencing the main application.

Curing

Correct curing procedures must be adopted, especially in hot dry conditions or in areas exposed to drying winds. It is recommended that repair mortars, renders and screeds are cured with Cure-Rite sprayed at a rate of 5m² per litre unless the surface is to be subject to subsequent treatments such as tiling or painting. An alternative method is to cover with overlapping polythene sheets for at least 48 hours at 20°C.

Estimating quantities

As a general guide, for optimum results we recommend 10 litres Latex/50kg cement in the mix design. The approximate quantities required of Mulsifix Latex per m² for various applications are as follows:

Slurry Bondcoat	0.3 litres
Thin Bed Tile Adhesive ribbed	0.2 litres
3mm Bed Tile Adhesive continuous	0.6 litres
6mm Bed Tile Adhesive	1.2 litres
12mm thick Repair Mortar/Flooring	1.5 litres
N.B. These figures must be checked by contract or prior to	ordering.

Packaging and supply

Mulsifix Latex is supplied in 1, 5, 25 and 200 litre non-returnable

Precautions

Do not dilute Mulsifix Latex beyond the quoted recommendations and allow for any water content in the sands used. Do not use water which has dissolved salt content. Surplus adhesive should be removed from tools etc. with water before it sets. Mulsifix Latex mixes should not be applied when conditions are not suitable for good concreting practice. In particular do not apply below 4°C. Replace the lid after use and store in a cool dry place.

Health and safety

Although essentially non-toxic, continual contact with the skin should be avoided, and operatives are recommended to wear protective clothing. If the product enters the eye, wash thoroughly with water and if discomfort continues seek medical advice. For

further information please refer to Material Safe Handling Guide.

Technical service

We can provide technical service at the specification stage and/or during application through our Technical Department or Laboratory. Detail specification or further information can be provided for specific projects or more general works. Site visits and on-site demostrations can be arranged on request.



Trade Mark of Weber & Broutin United Kingdom Ltd., from whom we have obtained a licence.

To the best of our knowledge and belief, the information contained in this leaflet is true and accurate, but as conditions of use and any labour involved are beyond our control, the end user must satisfy himself by prior testing that the product is suitable for his specific application, and no responsibility can be accepted, or any warranty given by our Representatives, Agents or Distributors. Test results shown reflect typical figures based on laboratory testing under

AGE INDUSTRIES & TRADING SDN BHD

(320310-H)

No. 67, Jalan 30A/119, Taman Taynton View, 56000 Kuala Lumpur. Tel: 603-9130 7563 Fax: 603-9130 8580 E-Mail: age@agesb.com Website: www.agesb.com