



HIND STYRENE BR (SBR LATEX)

PRODUCT DATA SHEET

POLYMER MODIFIED WATER RESISTANT REPAIR AND BONDING AGENT

DESCRIPTION

Hind Styrene BR is a milky synthetic latex emulsion based on modified Styrene Butadiene Rubber (SBR) which imparts bonding, waterproofing and anti-weathering properties to cementitious systems.

USES

Hind Styrene BR has wide range of uses for waterproofing, as a grout admixture, in putties and in either forms, in the repair and rehabilitation industry, rendering and tile fixing etc and bonding old concrete to new concrete.

ADVANTAGES

- Outstanding resistance to water and moisture.
- Excellent adhesion to a wide range of substrates.
- Improves flexibility of the treated area.
- Improves mechanical properties and abrasion resistance.
- Improves chemical resistance to substrates.
- Low permeability makes mortars/concrete waterproof.
- Improves workability and adhesion of mortars.
- Strength remains unaffected.
- Resists freeze-thaw phenomenon in cold climates.
- Prevents finished surfaces from cracking.
- Improves bond to mother substrates.
- Weatherproofs walls from rising dampness/salt petre action.

APPLICATION

Surface preparation: The substrate must be structurally sound, clear and dust free, oil, grease and contaminants must be removed mechanically. Smooth surface must be scrubbed. Surface should be damped with water prior to application of the bonding primer, modified mortar or concrete. All excess water should be removed from the surface.

PROPERTIES

| Aspect | Milky White Liquid |
|------------------|--------------------------------|
| pН | ≥6 |
| Specific Gravity | 1.02 ± 0.01 |
| Base | SBR (Styrene butadiene Rubber) |

Technical Informations

As tested in accordance with **BS 6319** (wet cured) the values of the typical mechanical properties of 1:3 cement sand mortar at Water/Cement ratio -0.45 for control & Water/Cement Ratio -0.35 admixed with **Hind Styrene BR** (5Kg per 50 Kg cement) is given below:

| Mechanical Properties | Control Conditions | Hind Styrene BR |
|--|--------------------|-----------------|
| Compressive Strength N/mm ² | | |
| (BS 6319 Part-2 -1983) | | |
| 3days | 12.0 | 13 |
| 7days | 13.0 | 14.5 |
| 28 days | 22.0 | 23.5 |

| Tensile Strength N/mm ² at 28 days | 2.5 | 3.5 |
|--|-----|-----|
| (ASTM C 190-85) | | |
| Flexural Strength N/mm ² at 28 days | 5.0 | 6.5 |
| (BS 6319 Part-3 -1983) | | |

Note: Addition of increased dosages of Hind Styrene BR and further reduction of water leads to better and improved mechanical properties. Cementitious based materials are less chemical resistant. Incorporation of Hind Styrene BR to cement mortars makes its impermeable and hence reduces the attack of aggressive chemicals.

APPLICATION & RECOMMENDED CONSUMPTION

| Ingredients | Bonding Coat /Waterproof | Polymer Mortar for | Polymer Concrete / |
|------------------|---|--|---------------------------------------|
| | coating | Plastering | Overlay |
| Cement | 3 to 3.5 parts | 10 parts by weight | 10 parts by weight |
| | by weight | | |
| Zone II Sand | Nil | 40 parts by weight | 15 parts by weight |
| | | | 1 |
| 10 mm nominal | Nil | Nil | 30 parts by weight |
| size Coarse | | | |
| Aggregates | | | |
| Water | 1 part by weight | 4 parts by weight | 4 parts by weight |
| Hind Styrene BR | 1 part by weight | 1 part by weight | 1 part by weight |
| Hind Styrene BR: | 1:1 : 3 to 3.5 | 1:04:10 | 1:04:10 |
| Water : Cement | | | |
| Coverage | $0.250 \text{ to } 0.50 \text{ Kg/m}^2/\text{coat}$ | $0.45 \text{ to } 0.50 \text{ Kg/m}^2/10 \text{ mm}$ | 1 Kg/m ² / 25 mm thickness |
| | _ | thickness | |

Note: For more economical designs the percentage weight of Hind Styrene BR with cement can be reduced keeping in view the requirements and uses. The various proportions as shown above are typical guidelines and may vary depending on site conditions, such as temperature, aggregate conditions, etc which leads to changing of W/C ratio for Polymer Mortar Plastering and polymer Concrete.

OTHER APPLICATIONS

| Mix proportion | Putty for joints | Sealant for tile joint |
|-------------------|------------------|------------------------|
| Hind Styrene-BR | 1 | 1 |
| Water | 1 | 2 |
| Cement (Grey) | 3.5 to 4 | |
| Sand | 10.5 to 12 | |
| White Cement | | 4 to 4.5 |
| Lime stone powder | | 4 to 4.5 |
| Color pigment | | As required |

Polymer modified concrete (PMC) for construction joint or any other PMC. Mixed design specified as per site engineer. **Hind Styrene BR** 2 to 10% by weight of cement. Plasticiser cum water reducer may be used

Polymer modified cement grout mix: Mix 4 to 8 % Hind Styrene BR by weight of cement with or without other grout admixture and 40 to 44% water for base plate and pocket grouting and for injection grouting.

SHELF LIFE

12 months from the date of manufacture in unopened conditions. To be stored in cool and dry place away from direct sunlight.

PACKING

500 gm, 1, 5, 20 Kg or as per requirement

HANDLING PRECAUTION

Hind Styrene BR is non-toxic, non-flammable and ingestion is to be avoided. Any splashes to the skin must be washed with water. If contact with eyes occurs, wash well immediately with water and seek medical advice

Note:

- Hindcon Chemicals maintains a team of technically trained professionals to provide full support to your problems in construction, and recommend the correct product to suite your specific requirements. Our authorized applicators can attend your site for application of the products.
- The content of the Technical datasheet are for general information and guideline. The results shown here are generated from our laboratory or from our site experiences.
- Qualities of our products are maintained as per ISO9001:2008 recommendations and continuous researches. The behavior can change as per the prevailing conditions at the
 time of applications.
- Since HINDCON CHEMICALS LIMITED has no control over the use to which the users may put the material, it does not claim or warrant that in the user's particular
 circumstances, the result that the user will obtain from the product will be the same as those described in this communication or that the user will find the information or
 recommendations complete, accurate or useful. The client must test and ascertain the safety and fitness for the product for use.

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