

TECHNICAL DATASHEET

ASCOBOND 450

SBR Latex Based Multi Bonding Agent and Waterproofing Additive



PRODUCT DESCRIPTION

ASCOBOND 450 is Styrene Butadiene Rubber Based Synthetic latex and it is designed to improve the waterproofing, bonding, physical properties and integrity of Cementitious mortars, screeds and concretes. **ASCOBOND 450** also act as a bonding agent / sealer to concrete, plaster or other porous substrates. **ASCOBOND 450** improves durability, compressive, tensile and flexural properties of modified mixes. In addition, screeds and renders can be waterproofed, greatly improving their resistance to abrasion, frost, water vapor transmission and chemical attack. It is suitable for horizontal or vertical applications both internally and externally. In certain applications **ASCOBOND 450** provides a simple, easy to use and cost saving alternative to epoxy and polyester resin based systems.

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VERSION : 1 (DEC : 2022)

KEY FEATURES

1. Highly versatile and can be used for a variety of applications
2. Easy to use
3. Enhance the Flexural and Tensile strength of the mortar & renders
4. Greatly improves adhesion to substrate
5. Waterproofing Cementitious systems
6. Reduces shrinkage cracking

RECOMMENDED APPLICATIONS

1. For bonding of new to old concrete, tile bedding and fixing of slip bricks etc.
2. Waterproofing Internally: Basements, Swimming pools, Potable water tanks, sludge tanks & ducts, tunnels and underpasses etc.
3. Waterproofing Externally: Structures above ground
4. Waterproofing Suspended Floors: Balconies, wet areas, plant rooms etc.
5. Waterproof/Protective Slurries: Potable water tanks, sewerage and mild chemical holding tanks, porous concrete, block work
6. As an admixtures of Cementitious systems, Improves the durability, water proofing and abrasion resistance properties of mortars
7. Repairs of concrete

TECHNICAL PROPERTIES (Complies to ASTM C 1059 Type II ,EN 12190)

Appearance & Base	SBR latex modified viscous liquid
Color	Milky White
Specific Gravity	1.10 ± 0.02 Kg/L
pH	9 ± 1
Solids	≥ 45 %
Compressive Strength	≥ 40.0 N/mm ² @ 28 days (*Specific Mix Design)
Bond Strength	≥ 4.50 N/mm ²
Tensile Strength	≥ 3.50 N/mm ²
Adhesion to Concrete	≥ 2.1 N/mm ² (Concrete Failure)
Water Resistance	Up to 3 bar pressure

The values obtained are from laboratory testing conditions and at 27 ± 2°C . On site tests may show slight variation due to site conditions and / or methods of testing. Follow company TDS to obtain best results.

APPLICATION METHODS:

1. SURFACE PREPARATION

All surfaces must be clean and structurally sound. Oil and grease must be removed. For best results the surface of the concrete should be mechanically scarified, although other methods including sand blasting may be employed.

2. PRIMING

Use a mix consisting of 2 parts OPC mixed with 1 part **ASCOBOND 450** gauging liquid (2 parts **ASCOBOND 450** with 1 part water) by volume. Mix into a smooth paste.

This primer is then brushed onto the prepared surface, after ensuring there is no free-standing water, using a stiff brush. It is essential that the topping is applied whilst the priming coat is still tacky. If it is allowed to dry out then the primer must be removed and surface re-primed using the same procedure.

Coverage Priming Coat: 2.5 – 3.5 m² per liter.

3. GENERAL PURPOSE MORTAR/SCREED

For the majority of applications the following mortar can be used as a render or screed after the surface has been primed as previously described. Thickness depends upon application but 12-15 mm is normal. On vertical surfaces this is built up in two application, normally time between applications is 6 hours but this is depend up on temperature. Where more than one coat is applied ensure that the intermediate coats are hatched to provide a mechanical key. If the surface dries out completely then the surface should be re-primed.

4. INTERNAL & EXTERNAL WATERPROOF RENDERS

Surface preparation is as previously described. Two priming coats should be applied ideally at right angles to one another. The second coat is to be applied immediately after when the first coat had dried up, approximately 30 minutes. Thickness of each sealing coat should not exceed 1.5 mm or crazing may occur. Allow the two priming coats to dry out completely for a minimum of 48 hours after which time the surface is again primed and the general purpose mortar applied

while the primer is still tacky. Minimum thickness to be 12-15 mm.

5. COVERAGE

i As waterproofing/ bonding slurry: 75ft² - 85ft² at the mixing ratio (1:5:8) with cement & water in 2 coats.

All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish practical consumption particularly for primers.

6. CURING

Curing is essential for all Cementitious products to prevent possible shrinkage cracks and ensure the performance characteristics of the product are achieved.

7. PRECAUTION WHILE USE

- I. Use all the contents of container in one go other wise material starts to become hard in contact with air.
- II. For best results mix the contents thoroughly covering bottom of the container before and during application.

8. PACKING

Available in 1, 5, 20, 50 & 200 Liter. packing in jerry can or bucket with sealed cap.

9. MIX DESIGN

Dry blend the sand, cement and aggregates together in the mixer in accordance with the mix design guidelines below,

APPLICATION	OPC (Kg)	SAND (Kg) ZONE 2	AGG (Kg) 4-6 mm	ASCOBOND 450 (L)	POTABLE WATER (L)	YIELD (L) (APPROX.)
Bonding Slurry	50	00	00	10	14	40
Waterproofing Slurry	50	00	00	20	5	41
Repair Mortar 5-40 MM Thick	50	125	00	9	7	79
Render 5-12 MM Thick	50	150	00	9	6	87
Heavy Duty Floor Screed 10-20 MM Thick	50	87	87	10	6	110

DISCLAIMER:

While the technical details & recommendations contained in this document and the related details given by the representatives of the company correspond to the best of our knowledge & experience, all the above information must in any case be considered as merely indicative and subject to confirmation. Users are recommended to conduct a product suitability test before it is used at full scale. In any case, the consumer alone is entirely liable for any consequences resulting from using the product. For the most up-to-date TDS, please visit our website at www.ascolite.in. Our company policy is one of ongoing R&D; therefore, we reserve the right to update this information without prior notice at any time. As the correct identification of the problems, the quality of other materials used, on-site environmental conditions and the workmanship on-site are factors beyond our control, there is no express or implied guarantee/warranty as to the results achieved. The company assumes no liability or consequential damage arising from the use of our products for unsatisfactory results. Site visits are not a supervisory responsibility wherever provided. Suggestions made either verbally or in writing by the company may be followed, modified or rejected by the owner, engineer or contractor, since they are solely responsible for carrying out procedures appropriate to a specific application.

10. SAFETY GUIDELINE

- I. Use protective items while using **ASCOBOND 450**
- II. If come in contact with eyes, immediately wash eyes with plenty of water & seek medical advice.
- III. Use of Goggles, dust mask and gloves is highly recommended to protect eyes, skin and mouth while in use.

(Material Safety Data Sheets are available through company representative or ASCOLITE's website)

11. SHELF LIFE

12 months from production date if stored in original, unopened packaging, in places protected from moisture, sun exposure and frost.