



Let's Build GREEN

AN ISO 9001:2015 CERTIFIED COMPANY

Waterproofing System

### ILWA+

Integral Liquid Waterproofing Admixture for Concrete and Mortar.

#### Description

ILWA+ is a dark brown liquid based on lignosulphonates which mixes readily with water and therefore disperses evenly. ILWA+ waterproofs by improving the quality of the concrete or mortar. It reduces the water demand for required workability and minimises segregation and bleeding.

The surfactants in ILWA+ react in the cement, sand mixture to produce insoluble hydrophobic precipitates. These have a two-fold effect in reducing the permeability of the mix as they both repel moisture, due to their hydrophobic nature, and act as pore blocking agents to reduce the inter-connectivity of porosity in the mix.

#### Uses

To produce waterproof sand cement mortars, screeds, concrete and renders or to improve application of mortars by making them more cohesive and workable. To minimize permeability and increase the waterproofing properties of concrete and cement sand mortars for critical applications like roof slabs and screeds, basements, internal and external plastering, bathroom floors, water tanks, sumps, drains etc.

#### Advantages

- Provides integral protection to the mortar, render or screed, ensuring reduced permeability all through the applied material and not only on the surface.
- Reduced water permeability minimizes efflorescence caused by transport of dissolved salts through the mix.
- Entrained air bubbles assist in the formation of a stable cohesive mix, reducing segregation and bleeding and improving spreading and placing.
- Air entrainment improves mortar workability, allowing lower water contents to be used.
- Liquid admixture: Instant and complete dispersion throughout the mix. Uniform waterproofing throughout concrete matrix.
- High efficiency: Dramatic reduction in permeability of concrete/mortar.

#### Standards Compliance

ILWA+ conforms to IS: 2645 2003.

#### Instruction For Use

Mortar: ILWA+ is ideal for use with all sand/cement mortars where it is required to reduce permeability to a minimum. Plaster: ILWA+ is ideal for use with all sand and cement mortars where it is required to reduce permeability to a minimum.

#### Typical Properties & Specifications:

| Sr.No | Properties            | Specification  |
|-------|-----------------------|--|
| 1     | Physical Appearance   | Dark Brown liquid  |
| 2     | Chloride content      | < 0.2% As per IS: 2645-2003  |
| 3     | Compatibility         | Can be used with all types of cements, including pozzolanic but not High Alumina Cement.   |
| 4     | Permeability to water | Less than 15% as compared to 50% max. allowable under IS:2645-2003 compared to control sample.   |
| 5     | Setting Time          | No significant effect on setting time of concrete or mortar.   |
| 6     | Compressive Strength  | Maintains compressive strength equal to control concrete or mortar and can even improve on strength property if full advantage of water reduction potential is utilised. |
| 7     | Workability           | Improves workability at reduced water cement ratio.  |

#### Concrete

ILWA+ is recommended for all general concrete work where the risk of porosity and permeability must be minimised. E.g. Basements, tanks, balcony, floor and roof slabs. The required quantity of ILWA+ is measured and poured with the regular pouring of water in case of conventional concreting. Separate dispensing system is required for RMC plants. ILWA+ water mixture shall be added to the concrete or mortar and mixed thoroughly. Mixing shall be continued and further water shall be added until the required workability is obtained. The total amount of water added per mix in the initial batches shall be maintained for the remaining batches.

#### Note

Mixes using ILWA+ will require much less water than normal mixes for the same workability. Water reduction may be as much as 15% or more. If the moisture content of the sand or aggregate changes i.e., it becomes wetter or dryer, then the amount of water used must be reduced or increased to give the original workability.

#### Consumption

The minimum dosage is 125ml and the maximum is 200ml per 50kgs of cement. Site trials shall be carried out to arrive at the optimum dosage.





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### Packing

ILWA+ is supplied in 125ml, 1, 5, 20 and 200 liter containers.

### Shelf Life & Storage

ILWA+ has a shelf life of 12 months from date of manufacture when kept at a temperature between 5°C to 45°C and store in the original, unopened bags. All material shall be stored under cover in a manner that will prevent damage preferable on pallets and protected from excessive heat and moisture. Do not freeze.

### Health & Safety

ILWA+ does not contain any hazardous substances requiring labelling. It is safe for use with standard precautions followed in the construction industry, such as use of hand gloves, safety goggles, etc. For detailed Health, Safety and Environmental recommendations, please consult and follow all instructions on the product. Material Safety Data Sheet.

### Quality Assurance

MAP PRODUCTS PVT. LTD is a firm of Assessed Capability. The company conform to the standard quality system.

### Disclaimer

The information herein is based upon the best information available at the time of printing. Data provided is intended for those having skill and ability to use products recommended in a safe and responsible manner. LIABILITY is limited to the cost of material proven to be defective. There is no warranty expressed or implied as related to any issue which is deemed to be a direct result of improper acts of others or acts of GOD, constant submersion in harsh environments, workmanship or applicator, or any other cause and effect which is not related to defective material.

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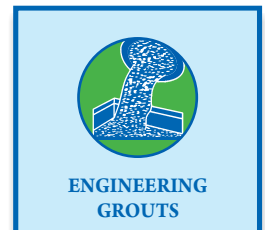
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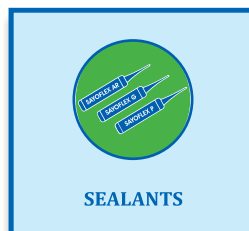
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