

PRODUCT DATA SHEET

CLASSIC®01 DPC

Low dosage, liquid, integral waterproofer for concrete and mortar

DESCRIPTION

CLASSIC®01 DPC is a liquid admixture for concrete to achieve high resistance to water ingress. It is based on a blend of surface-active agents and refined lignosulphonate.

USES

CLASSIC®01 DPC should be used in all structural concrete that is constantly or intermittently in contact with water such as sea walls, tunnels, basements, structural and pre-cast concrete in exposed super-structures. CLASSIC®01 DPC can also be used as water-proofing cum plasticizing admixture for cement mortars and plasters

CHARACTERISTICS / ADVANTAGES

- Increased durability.
- Reduced sulphate attack.
- Reduced efflorescence.
- Improved cohesion, reduce segregation.
- Pumpability of concrete is greatly improved.
- Improved surface finish.
- Reduced shrinkage cracks in plasters
- Do not reduce compressive strengths
- Liquid – easy to use.
- Low dosage – Economical.

APPROVALS / STANDARDS

- IS:2645-2003
- IS:9103-1999
- ASTM C494: Types A & D

PRODUCT INFORMATION

Packaging	CLASSIC®01 DPC is available in 1litre, 5litre, & 220 kg drums.
Appearance / Colour	Dark brown liquid
Shelf Life	12 months from date of production if stored in unopened, undamaged and original sealed packaging.
Storage Conditions	CLASSIC®01 DPC must be stored where temperatures do not drop below +5°C. If the product has frozen, thaw at +5°C or above and completely re-constitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature.
PH-Value	>6
Total Chloride Ion Content	<0.2%
Specific gravity	1.17 ± 0.02 at 25°C

APPLICATION INFORMATION

Recommended Dosage As a guide, a dosage range of 200 ml to 400 ml per 100kg of cementitious

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material is recommended.

Optimum dosage of CLASSIC®01 DPC should be determined with trial mixes. Higher dosages may be required when certain combinations of materials and conditions are present or water reduction in excess of 15% is required. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. Points to remember when producing waterproof concrete:

- Ensure water/cement ratio is within the range of 0.40 to 0.60.
- Keep water content as low as possible.
- Place concrete quickly and compact it well.
- Ensure complete curing with a MASTERKURE curing compound.

Effects of Over Dosage

A severe over-dosage of CLASSIC®01 DPC shall result in some of the followings:

- Extension of the initial and final set
- Increase in air entrainment
- Bleed/segregation of mix, quick loss of workability
- Increased plastic shrinkage

A slight overdosing may not adversely affect the ultimate strength of the concrete and can achieve higher strengths than normal concrete, provided it is properly compacted and cured. Due allowance should be made for the effect of fluid concrete pressure on form work, and stripping times should be monitored.

Compatibility

CLASSIC®01 DPC is compatible with most admixtures used in the production of quality concrete including normal, other mid-range and high-range water-reducing admixtures, air entrainers, accelerators, retarders, extended setcontrol admixtures, corrosion inhibitors, and shrinkage reducers. CLASSIC®01 DPC is also compatible with slag and pozzolans such as fly ash and silica fume.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTS

CORROSIVITY – NON CHLORIDE, NON CORROSIVE

CLASSIC®01 DPC admixture will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, prestressed concrete or concrete placed on galvanized steel floor and roof systems. Neither calcium chloride nor any calcium chloride-based ingredients are used in the manufacture of CLASSIC®01 DPC admixture. In all concrete application, CLASSIC®01 DPC admixture will conform to the most stringent or minimum chloride ion limits currently suggested by construction industry standards and practices.

WORKABILITY

CLASSIC®01 DPC ensures that concrete remains workable in excess of 60 minutes at +25°C. Workability loss is dependent on temperature, and on the type of cement, the nature of aggregates, the method of transport and initial workability.

It is strongly recommended that concrete should be properly cured particularly in hot, windy and dry climates.

The use of MasterKure 111CF, evaporation reducer to prevent quick moisture loss from the surface of the flat works such as pavements in the dry, windy and hot climates is highly recommended.

ECOLOGY HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION

CLASSIC®01 DPC is a ready-to-use liquid which is dispensed into the concrete together with the mixing water. The plasticising effect and water reduction are higher if the admixture is added to the damp concrete after 50 to 70% of the mixing water has been added. The addition of CLASSIC®01 DPC to dry aggregate or cement is not recommended

