

Technical Data Sheet KALMATRON® KF-D Powdered Admixture to the Cement Sealers

DESCRIPTION

KALMATRON® KF-D. KALMATRON® KF-D designed as an admixture to the Cement's Soils Containing Sealers of the CMS (Crumbled Material's Sealant) for enhancement of soils consolidation with strength accelerating and any required level of liquid impermeability.

KF-D performs as a compactor of crumbled concrete and densifier of disintegrated and/or soggy soils.

KF-D provides stable consolidation of injected structures with increasing of compressive strength up to 40%.

KF-D improves liquid impermeability of Earth-Material's Structures (EMS) and concrete/masonry building's elements.

KF-D stabilizes the flowing of soggy soils of the fields, offshore, sinkholes, foundations, and etc.

KF-D is a cost-effective solution that utilizes unusable structures to be restored up to impermeable to the liquids without the need of isolating membranes or water mitigating solutions and devices.

ASTM CLASSIFICATION

KF-D falls under the classification of the following types of ASTM C 494:

- Type F – high range water-reducing admixture;
- Type S – specific performance admixture.

APPLICATIONS

Recommended for use in:

- Applications by injection, premix, gunite or sorption treatment forms a chemically structured mass where consolidated particles involved as coarse filler.
- Reduction of underground water tables;
- Water mitigation from Earth Built Structures (EBS);
- Restoration of damped and soggy areas up to the finished objects such as stadiums, runways, auto & rail roads, water canals and ponds, etc.
- Water protection of Earth Built Structures such as caves, tunnels, wells, roads, etc.;

TECHNICAL DATA

- Appearance: Dark Grey to Grey powder;
- Density: 1300 Kg/m³ or 81 Lb/CF;
- Specific gravity: 2.16;
- pH: 9÷11.

FEATURES AND BENEFITS

- Cost reductions. For CMS mixes, KF-D will solely replace the following admixtures and supplementary materials:
 - Hardeners;
 - Strength gainers;
 - Density gainers;
 - Curing compounds;
 - Water reducers;
 - Superplasticizers;
 - Pozzalons;
 - Kaolinite;
 - Silica fume;
 - Membranes;
 - Fine fillers;
 - Fibers, etc.
- No Drying Shrinkage and post hardening deformations;
- Exothermic heat is lower by 50%;
- 100% water impermeability of EMS and EBS at 3 ½" to 5" thick layer;
- Strong adhesion to any porous material;
- Increased pumpability;
- Increased workability;
- Eliminates palpability;
- No shrinkage cracks;
- No cracks, flakes, efflorescence and slid areas;
- No bleeding or oozing;
- Highest resistance to climate corrosions;
- Highest freeze-thaw resistance;
- No curing is required.

DIRECTION FOR USE/INSTRUCTIONS

Dosage: **KF-D** is applicable as an admixture of 2.5 Kg per 100 Kg of cement to get cementitious EMS.

Due to variations in concrete materials, applications and/or jobsite conditions, it is suggested that dosages outside of normal usage range may be required. In such cases, contact KALMATRON CORPORATION Representative.

Product technical data: KALMATRON® KF-D

PACKAGING

KF-D is packaged in 50 Lbs plastic bags.

SHELF LIFE

Unlimited, when product is stored in the standard bags and designated industrial environment.

PRECAUTIONS

- Test batches and sample testing must be performed by strict compliance with manufacturer's test instructions;
- KF-D is not hazardous, not flammable and not explosive for applications, transportation, and storage;
- In all cases, consult the Material Safety Data Sheet (MSDS) before use.

SAFETY

Operation with KF-D is similar to cement mixing jobs. Always, use rubber gloves. In case KF-ASH is inhaled, swallowed or gets in contact with eyes, rinse and wash abundantly with water. Refer to the MSDS for additional health and safety information.

TECHNICAL SERVICES

KALMATRON CORPORATION provides technical assistance services for on-site jobs and on mix design, admixture selection and evaluation trials.

RELATED DOCUMENTS

Material Safety Data Sheet

WARRANTY

KALMATRON CORPORATION provides warranties on KF-D performance for specified project, known application requirements and EMS and concrete/mortar mix designs before the registered date of KF-D application. KALMATRON CORPORATION warrants KF-D against defects in material or workmanship as follows:

- 1) For a period of 12 calendar months from the registered date of application, KALMATRON CORPORATION will be responsible to replace determined to be the fault of product defect.
- 2) In addition, KALMATRON CORPORATION will supply another KALMATRON® product suitable for repair during a period of 12 calendar months from the registered date of application for additional charge.
- 3) This warranty does not cover any damage due to accident, natural disasters, environmental impact, misuse, abuse, or negligence.

In order to obtain warranty service, user must follow KALMATRON CORPORATION's application instructions, industry regulations and workmanship guidelines for specified projects only.

For Professional use only. Not for sale to or use by the general public.

KALMATRON CORPORATION

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