

# Technical Data Sheet KALMATRON® KF-ASH Powdered Concrete Admixture

## **DESCRIPTION**

KALMATRON® KF-ASH is an additive to the concrete mixes containing up to 50% of IIW (Incinerated Industrial Waste) from the weight of the cement into the concrete mix. IIW are fly ash, slag ash, volcanic deposits or crumbled slag, etc. being encapsulated by KF-ASH provide stable insulating performance of conventional concrete mix with IWW as Lightweight concretes.

**KF-ASH** is a cost-effective solution that utilizes IIW in conventional concrete mixes to be impermeable to the liquids without the need of isolating membranes or water mitigating solutions and devices.

**KF-ASH** is the most economical for restoration of acoustic properties of damaged or damped concrete screens.

#### **ASTM CLASSIFICATION**

KF-A 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:

- Production of Lightweight concrete;
- Production of liquid impermeable concrete, including crude oil;
- Production of new or upgrading of existing acoustic walls, panels, or screens;
- Fire protected structural elements and equipment;
- Heat resistant coatings of industrial units;
- Restoration of thermal resistance of aged or damaged wall's panels or masonry walls, separators, industrial fridges, metallurgical plants, fortification structures, etc.

#### **TECHNICAL DATA**

- Appearance: Light Grey to Grey powder;
- Density: 1300 Kg/m<sup>3</sup> or 81 Lb/CF;
- Specific gravity: 2.16;
- pH: 8÷10.

#### **FEATURES AND BENEFITS**

- Cost reductions. For IWW concrete mixes, KF-ASH will solely replace the following admixtures and supplementary materials:
  - Foam generating additives;
  - Heat expanded materials;
  - Water reducers;
  - Superplasticizers;
  - Pozzalons;
  - o Silica fume;
  - Membranes;
  - Fine fillers;
  - Fibers;
  - Density and strength gainers.
- No surface preparation (remove loose materials);
- No Drying Shrinkage and post hardening deformations;
- Exothermic heat is lower by 50%;
- 100% water impermeability of Lightweight concrete at 2 ½" to 4" thick layer;
- Strong adhesion to any porous material;
- Applicable on a job sites in ambient temperature range of -4°F to 104°F;
- Increased pumpability;
- Increased workability;
- No shrinkage cracks;
- No cracks, flakes, efflorescence and slid areas;
- No bleeding or oozing;
- Highest resistance to chemical and climate corrosions;
- Highest freeze-thaw resistance;
- No curing is required.

# **DIRECTION FOR USE/INSTRUCTIONS**

Dosage: KF-ASH is normally used at rate of 8 Kg/m³ or 13 LB/CY or ½ LB per 1 CF for IWW concrete mixes. 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-ASH

#### **PACKAGING**

KF-ASH 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-ASH 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-ASH 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-ASH performance for specified project, known application requirements and concrete/mortar mix designs before the registered date of KF-ASH application. KALMATRON CORPORATION warrants KF-ASH 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.

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### KALMATRON CORPORATION

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