

Technical Data Sheet Krete^{100®} Powdered Concrete Admixture

DESCRIPTION

Krete^{100®} as a powdered admixture is designed to be added into the ordinary or adjusted concrete mixes to use them for repair and restoration of the concrete, rock, and masonry surfaces by the coatings with thicknesses from **8 mm to 35 mm** or from **1/3" to 1 1/4"** to restore abrasion resistance, liquid's impermeability, compression and tensile strengths, and resistance to the chemical and physical corrosion.

Krete^{100®} is a cost-effective solution that provides a transformation of conventional concrete mix to High Performance concrete. **Krete^{100®}** makes concrete strong and durable without the need of any other admixture and/or supplement materials or future applications.

ASTM CLASSIFICATION

Krete^{100®} falls under the classification of the following types of ASTM C 494:

- Type C – cement hydration accelerator;
- Type F – high range water-reducing admixture;
- Type S – specific performance admixture.

APPLICATIONS

Recommended for use in:

- Production of high performance concrete;
- Production of liquid impermeable concrete, including crude oil;
- Fineness and corrosion resistant precast concrete;
- Abrasion and salt resistant trafficable concrete;
- Non-shrinking concrete for flat works;
- Pervious concrete;
- Waterproofing.

TECHNICAL DATA

- Appearance: Light Grey to Grey powder;
- Density: 1300 Kg/m³ or 75 LB/CF;
- Specific gravity: 2.16;
- pH: 9÷11.

FEATURES AND BENEFITS

- Cost reductions. For conventional concrete mixes, **Krete^{100®}** will solely replace the following admixtures and supplementary materials:
 - Water reducers;
 - Superplasticizers;
 - Pozzalons;
 - Silica fume;
 - Fly ash;
 - Membranes;
 - Fine fillers;
 - Fibers;
 - Density and strength gainers.
- Dosage reduction of water at the rate of 15%-30% in conventional concrete mixes;
- No surface preparation (remove loose materials);
- High cement hydration;
- Yield of mixed batch is higher by 8% to 14% of cement gel.
- Early strengthening at 1st to 2nd day;
- Compressive strength is increased by up to 35%;
- Shrinkage is lower at 2 to 3 times;
- Exothermic heat is lower at 30% to 50%;
- 100% water impermeability at 3/4" concrete thick layer;
- Strong adhesion to any porous material;
- Works with concrete 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;
- Highest resistance to chemical and climate corrosions;
- Highest freeze-thaw resistance;
- No curing is required.

Product technical data: Krete¹⁰⁰®

DIRECTION FOR USE/INSTRUCTIONS

Dosage: **Krete¹⁰⁰** is applicable by the volumes **14 LB/CY** or **8.5 Kg/m³** and by the weights as **2 LB per 94 LB** of sack of cement or **2 Kg per 100 Kg** of cement batched into the mix based on fine aggregates only.

Do not dissolve **Krete¹⁰⁰** with water. Just strew it into the batch.

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.

PACKAGING

Krete¹⁰⁰ is packaged in 50 LB 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;
- **Krete¹⁰⁰** 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 **Krete¹⁰⁰** is similar to cement mixing jobs. Always, use rubber gloves. In case **Krete¹⁰⁰** 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 **Krete¹⁰⁰** performance for specified project, known application requirements and concrete/mortar mix designs before the registered date of **Krete¹⁰⁰** application. KALMATRON CORPORATION warrants KF-A 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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