



KALMATRON® KF-D APPLICATION INSTRUCTION

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.

■ CMS PREPARATION FOR INJECTIONS

1. Balance of 2.5 Kg of KF-D.
2. Balance of 100 Kg of ordinary Portland cement.
3. Mix for no less than for 3 minutes into the standard mixer to get ready CMS.

■ APPLICATION BY INJECTION

1. Use at Water-Cement at 0.6 ratio with corrections to the current application.
2. Use apparatus for injections of CMS with the highest feasibility.
3. Provide curing of injected site by water spray till the soaked surface.

■ APPLICATION BY PREMIX

1. Prepare CMS by mix of 10 Kg of KF-D with 300 Kg of cement to be applied per 1 m³ of damaged soil.
2. Apply on a site by KF-D strewing* on a soil, scraping on a depth of soil deterioration and compacting by the rubber tired roller.
3. For the soil with moistness below 10%, spray water on a surface by 5 Liters/m³.
4. Provide final soil compaction by vibrator or rubber tired roller.

■ Notices:

- * - KF-D consumption per 1 m³ of soil could be evaluated by the proportions:
- Let assume that needed depth of soil compaction is **30 cm**;
- Volume of soil per 1 m² is: $0.3 \text{ m} \times 1 \text{ m}^2 = \mathbf{0.3 \text{ m}^3}$;
- Since KF-D consumption per 1 m³ is 10 Kg, then per 0.3 m³ it is **3 Kg** of KF-D;
- Weight of cement is **90 Kg**.
- Amount of the cement could be reduced by **25%** if that soil contains particles of clay no less than 2% from the weight of the soil.

Therefore, for the damaged soil on a depth at 30 cm, apply 3 Kg of KF-D and at 70 Kg to 90 Kg of cement per 1 m² of needed soil compaction area.

■ SAFETY

Operation with KALMATRON® KF-D is similar to the cement mixing jobs. Always use an approved respirator and rubber gloves. In case KALMATRON® KF-D is inhaled or gets in contact with the eyes, eyes, rinse and wash abundantly with water.