

CX ISOVIA 7030

Soil stabilization technology

Characteristics

CX ISOVIA 7030 is a liquid chemical based on silicates in concentrated version (mother solution) that is used for soil stabilization together with cement or alternative cementitious materials (fly ash, slag, CKD, LKD)

Technical Data

Density (20 °C): 1,40 ± 0,02 g/cm³

Colour and form: transparent liquid

Dosage

CX ISOVIA 7030 is used in a dosage of 0.65 L/m³ for a soil depth of 15-20 cm.

Dilution

CX ISOVIA 7030 is used diluted in water. The dilution ratio is around 1:32 (mother solution: water) depending the OMC (optimal moisture content) of the soil to have the best compaction. The dilution of **CX ISOVIA 7030** is made by putting the water needed inside a tank/ truck and adding the needed quantity of concentrated solution in the tank/truck. The mixing procedure of **CX ISOVIA 7030** and water is made by moving the tank/truck back and forward for several times.

Application

CX ISOVIA 7030 after dilution is applied to the soil by spraying it after the application of the cement or alternative cementitious material (see the soil stabilization steps). The application of the product cannot be done under rainy weather conditions and it is preferably not having rain before the final compaction of the road.

Steps process for soil stabilization in situ

- 1- Preparation of the road/ scarifying
Prepare the road to have the final level of the road with the material in situ. Mix the soil under a depth of 15-20 cm. Remove the stones bigger than 10 cm.
Equipment: ripper with grader
- 2- Addition of dry additive
Spread cement or other type of supplementary cementitious material on top of the soil. The quantity of cement or cementitious material can vary from 3% wt to 5% wt, up to 10 % wt depending of the type of soil.
Equipment: cement spreader
- 3- Spraying admixture technology
Spray the **CX ISOVIA 7030** diluted in water on the soil.
Equipment: Water tank with spray system or water tank connected to a road reclaimer
- 4- Homogenization of the soil and leveling
Mix the soil and the chemical and level to the required slopes.

Equipment: Road reclaimer or ripper and grader

5- Compaction

Compact the road

Equipment: vibratory roller compactor of 12-15 tons

6- Sealing

Seal the eventual little cracks on the surface with a pneumatic compactor 8 tons /9 wheels

7- Curing

For hot weather environment and sandy soil, after the maximum compaction is reached is recommended to spray water on top of the surface

Equipment: water tank with spray system

Water tank with spraying system



Road reclaimer



Equipment

Ripper/ Grader



Roller vibrating compactor- min 12 ton



Cement spreader



Pneumatic compactor 8 ton/9 wheels



Contact

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