

CAC- Earth Foam 111

Soil conditioning foam

CAC- Earth Foam 111 is a soil conditioning foam specifically developed to be used with tunnel boring machine. It acts as a soil conditioner for various types of soil conditions ranging from wet to sandy clay type. It creates a temporary cohesion of the soil as well as a reduction in water permeability. It also gives the soil a cohesive characteristic which is necessary for tunnel boring. The foam also provides an air cushion for the soil which compensates for the abrupt pressure changes at the tunnel face.

AREA OF APPLICATION:

- Tunnel boring machinery
- Designed for silt to sand soils which may contain a high amount of water
- Consistency control
- Soil slurry support

Primary uses to obtain-

- Works with both acidic and alkaline type soil conditions
- Easier 'mucking'.
- Improves rheology of the soil
- Reduced permeability.
- Creates plastic deformation properties in the soil, which provides an even and controlled support pressure and increased face stability.
- Reduction of internal friction in the soil paste and lower abrasiveness of the soil at the cutter head.
- Environmentally safe and non-toxic

METHOD OF APPLICATION:

An aqueous solution of this soil conditioning foam can be expanded with air to produce stable foam. The foam expansion and the foam injection rate onto the face, into the working chamber or screw conveyor depend on soil conditions encountered.

DOSAGE:

Dosage level may vary depending on soil condition. Typically it is used at range from 0.5% – 5%). Soil conditioning polymers can also be jointly used with this to strengthen the foam or to adjust the properties of the excavated soil. For the first use and combination with other soil conditioning agents, please contact your local CAC representative.

FOAM EQUIPMENT:

It can be used with the standard TBM dosing and foaming equipment.

TECHNICAL PROPERTIES:

Appearance	Light yellowish Liquid
Specific Gravity @25°C	1.020 ± 0.020
Solubility in water	Soluble
pH (5% solu ⁿ .)	8 -10

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PACKAGING:

It is available in standard 200 lit. drum and other packing also available on demand.

STORAGE:

Material must be stored between 5°C and 40°C. kept in dry and out of direct sunlight or freezer condition. If stored in original closed containers, it will have a shelf life of 12 months.

SAFETY PRECAUTIONS:

Standard precautions for handling chemical products should be observed: Avoid eye and skin contact and wear rubber gloves and safety glasses. For further information, refer to the Material Safety Data Sheet.

Disclaimer:

The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests and take trials to ensure on suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of the other materials used and on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The Company does not assume any liability or any consequential damage for unsatisfactory results, arising from the use of our products.