

CELBEX 653

Thixotropic Cement Grout Modifier

Product Overview

CELBEX 653 is a specialized thixotropic modifier designed to create low-mobility cement grout, ideal for applications in unstable soils, water-filled voids, and conditions with flowing water. This product ensures the grout remains in place and resists washout, making it essential for demanding geotechnical projects.



Key Features

- **Thixotropic Gelation:** Rapid thixotropic gelation minimizes washout, allowing cement grout to stay in place and resist dilution.
- **Washout Resistance:** Effectively overcomes site conditions prone to washout, thereby reducing cement loss and enhancing project efficiency.
- **Non-Toxic:** Composed of a non-toxic blend of water-soluble polymers, ensuring safety and environmental compliance.
- **Versatile Compatibility:** Compatible with various cement types, cement-bentonite mixtures, and other performance-enhancing additives.

Physical Properties

Colour	White
Physical State	Powder
Shelf Life	Up to 24 months
Packaging	Available in 18 kg pails

Typical Compressive Strengths

Times	Neat Cement	CELBEX 653
18 hours	580 psi	435 psi
24 hours	1015 psi	725 psi
7 days	4640 psi	3625 psi
28 days	7540 psi	6380 psi

Applications

CELBEX 653 is ideal for cement grouting in tunnels, dams, deep excavations, rock fissures, and granular fills. It is particularly effective in "stop and stay" grouting applications, providing stability in weak ground conditions.

Application Guidelines

Preparation: Drill conventional holes for grouting purposes. Mix cement grout with a typical low water-to-cement ratio of 0.75 or less. The recommended dosage of **CELBEX 653** ranges from 25 to 250 grams per 40 kg bag of Portland cement.

Application: Begin injecting the cement grout, then slowly add **CELBEX 653** as grouting progresses. Thickening is almost instantaneous upon the addition of **CELBEX 653**. Gradually add **CELBEX 653** to the grout agitator tank during pumping. Do not add to colloidal or paddle mix tanks. Use the entire grout batch containing **CELBEX 653** before mixing a new batch. Slowly increase the dosage according to site conditions.

Clean Up: Flush mixers, pumps, hoses, and grouting accessories with clean water immediately after use.



Geotechnical and excavation contractors use specialty additives like **CELBEX 653** when working in water-bearing soils to stabilize weak ground conditions.

Recommended Equipment

Use with progressive cavity pumps (do not use in colloidal or paddle mix tanks).

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Limitations

- Slight reduction in compressive strength compared to ordinary cement grouts.
- Increased final setting time.

Safety & Handling

This material is intended for use by trained professionals with the proper equipment. Follow all current regulations and standards. Wear suitable protective equipment to prevent skin or eye contamination. Ensure adequate ventilation and avoid inhaling dust. Refer to the Safety Data Sheet (SDS) for detailed first aid information.

Customer Service & Orders

For additional information, please call us at 1-800-663-6633 or email info@multiurethanes.com.

Company Overview

Multiurethanes is a leading international supplier of materials, equipment, and technical support services for all types of grouting operations, including water cut-off, soil stabilization, concrete repair, sewer rehabilitation and waterproofing.