

MIXO[®] Shotcrete P

Non-Caustic Admixture for Sprayed Concrete and Shotcrete

DESCRIPTION

MIXO[®]Shotcrete P is a chloride free non-caustic admixture for sprayed concrete, shotcrete, and gunite. MIXO[®]Shotcrete P is supplied as a powder which is added to the mix to impart properties of high build and low rebound. MIXO[®]Shotcrete P starts up a sudden drop of slump and a thixotropic effect at the time of spraying. The reaction with particles of cement is immediate. MIXO[®]Shotcrete P is used in all dry-mix shotcrete applications.

USES

- Tunneling.
- Mining.
- Rock consolidation.
- Slope stabilization.
- Shaft protection.
- Thick repair works.

ADVANTAGES

- Low rebound due to controlled set.
- No adverse effect on strength.
- High build up with minimal slump ensures faster coverage rates.
- Enable a high build of sprayed concrete, shotcrete, and gunite.
- Grants fast setting for cold weather concreting.
- Compatible with all types of Portland cement, class C and F fly ash, slag, micro silica, calcium chloride, fibers, and approved air entraining admixtures.
- Chloride free, safe to be used in contact with the reinforcement.

STANDARDS COMPLIANCE

MIXO[®]Shotcrete P complies with ASTM C1141

PACKAGING

25 Kg bags.

SHELF LIFE & STORAGE

12 months shelf life when stored in its original unopened bags under shaded area in a temperature within the range of 2°C to 50°C.

PERFORMANCE GUIDELINES

Dosage Kg/100kg OPC	4.00
Initial setting time @25°C	60±10 Seconds
Final setting time @25 °C	<10 Minutes
Compressive Strength MPa	
8 hours	8 ± 1
1 day	14 ± 2
7 days	35 ± 2
28 days	40 ± 2

TECHNICAL PROPERTIES

Appearance	Off-White powder
pH @ 25°C	Neutral
Chloride content	Nil

APPLICATION INSTRUCTIONS

Dispensing

Mixing MIXO[®]Shotcrete P should be well dispersed in the dry mix, either as a bulk blend or with automatic dosing equipment while feeding the concrete mix. It is recommended that the moisture content of the mix is below 4% and that addition of MIXO[®]Shotcrete P occurs immediately prior to use.

Dosage

Lab trials should be made in prior to determine the right dosage of each concrete mix. The safe dosing range of MIXO® Shotcrete P is 2 – 8 kg per 100 kg of cement, including any cement replacement material.

Overdosing

Exceeding the recommended dosage will result significant reduction in setting time, which is already short. It might cause a decrease in compressive strength and obvious waste of sprayed concrete due to lack of adhesion between concrete and the surface. Please ask for CIC technical advice if any overdose is required.

Curing

Fresh concrete should be cured by water immediately after final setting time, especially at high temperatures. In the absence of water, use one of our Cicocure® products.

CLEANING AND DISPOSAL

Spillages of MIXO® Shotcrete P should be washed out with water or absorbed onto fine sand and disposed of in accordance with local authorities' regulations.

PRECAUTIONS

Health and Safety

MIXO® Shotcrete P is non-caustic. It should not be swallowed or allowed to come into contact with skin or eyes. Suitable protective goggles and gloves should be worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When contact with the skin, wash off immediately with soap and water. If swallowed, seek medical attention immediately, do not induce vomiting.

TECHNICAL SUPPORT

CIC provides on-site assistance, as well as consulting services on projects when requested. Technical data sheets on other MIXO products and guidance on their use are available on request.

Warranty

CIC products are guaranteed against defective materials and manufacture and sold subject to CIC's standard terms and conditions of sale. Whilst CIC endeavors to ensure that any advice, information or recommendation given is correct, the company cannot accept any liability either directly or indirectly arising from the use of its products. User of the product must test the product's suitability for the intended application and purpose, since the company has no control over the application of its products. Information contained in this document is given on the best current knowledge. Our Products are in continuous development and CIC reserves the right to change the product without prior notice.

