

MIXO® Fast NN

Set Accelerating Admixture

DESCRIPTION

MIXO® Fast NN is a non-chloride based set accelerating admixture that helps the first reactions of hydration especially at low temperatures. MIXO® Fast NN reduces significantly setting time and improves early compressive strengths. MIXO® Fast NN is especially adapted for any concrete application requiring increased early compressive or flexural strengths without detriment to ultimate strengths.

USES

- All concreting when high early strength is needed.
- Ready-Mixed Concrete.
- Prestressed Concrete.
- Precast (with or without steam curing).
- In large volume repairs, especially in water presence.

ADVANTAGES

- Increases ultimate strength at very early ages.
- Compatible with all types of Portland cement, class C and F fly ash, slag, micro silica, and fibers.
- Chloride free, safe to be used in contact with the reinforcement.
- Grants fast setting for cold weather concreting.
- Set is accelerated and mechanical strength grows rapidly so that frost does not damage fresh concrete.
- Compatible with all other MIXO admixtures.

STANDARDS COMPLIANCE

ASTM C494 Type E and BS EN 934 Part 2.

PACKAGING

210 liter drums or 1000 liter flow bins. Tanker loads are also available on request.

SHELF LIFE & STORAGE

12 months storage life if stored in its original unopened containers under a dry and shaded place in a temperature from 2°C to 50°C.

TECHNICAL PROPERTIES

Appearance	Clear to yellow liquid
Density @ 25°C	1.175±0.02 Kg/Ltr
pH @ 25°C	8±1
Chloride content	Nil

PERFORMANCE GUIDELINES

The table below shows a comparison of 3 concrete lab trials using the same ingredients except water (for the same workability, mix 2 is 6.5% less W/C than mix 1 and mix 3 is 10% less W/C than mix 1)

OPC 350 Kg/m³	Mix 1	Mix 2	Mix 3
Dosage Lit/100kg OPC	0.00	1.50	2.00
Initial setting time @10°C	10	5.5	4
Final setting time @10°C	15	8.5	7
Initial setting time @25°C	6	2.5	2
Final setting time @25°C	8	4	3.5
Compressive Strength MPa			
1 day	10	16	19
3 days	18	28	35
7 days	32	36	39
28 days	36	40	45

APPLICATION INSTRUCTIONS

Dispensing

The premeasured quantity of MIXO® Fast NN should be added to concrete components using a recommended dispenser. It should be added to the concrete with the mixing water to obtain the best results. Adding MIXO® Fast NN in concrete mixers for long distance concreting is not safe for truck mixers.

In such cases we recommend adding MIXO® Fast NN in the pouring place (at the site) just before casting. An additional one minute for every cubic meter is required to ensure good dispersion of MIXO® Fast NN in the concrete truck mixer with high speed rotation.

Dosage

Lab trials should be made in prior to determine the right dosage of each concrete mix. The safe dosing range of MIXO® Fast NN is 0.4 – 2.5 liters per 100 kg of cement, including any cement replacement material.

Overdosing

Exceeding the recommended dosage will result significant reduction in setting time, thus in bulk concrete pouring, high heat emission is expected. However, providing adequate curing means is necessary to keep the ultimate strength of the concrete impaired. Please ask for CIC technical advice if any overdose is demanded.

Curing

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

CLEANING & DISPOSAL

Spillages of MIXO® Fast NN should be washed out with water or absorbed into fine sand and disposed off in accordance with local authorities' regulations.

PRECAUTIONS

Health And Safety

MIXO® Fast NN is non-hazardous. 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 is made, wash off immediately with soap and water. If swallowed, seek medical attention immediately, do not induce vomiting.

TECHNICAL SUPPORT

CIC provides on-site assistance and 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.