

X-Mix Slurry 500

Aqueous Micro Silica improves performance of concrete and mortar formulations

Product Description

X-Mix Slurry 500 is an aqueous suspension silica fume for concrete to produce and place high performance durable concretes. It acts physically to optimize particle packing of the concrete or mortar mixture and chemically as a highly reactive pozzolan.

Advantages

- Increased durability- longer service life.
- Improved placing and pumpability.
- High early strength.
- Lower permeability and improved durability
- Greater resistance to abrasion and impact than conventional concretes of similar strength grade
- Compressive strengths in excess of 70 MPa are easily achieved.
- Higher flexural strength and modulus of elasticity than conventional concretes of equal compressive strength.

Uses

X-Mix Slurry 500 is used in concrete to meet the most demanding applications for high strength, chemical and abrasion resistant, such as

- High rise construction
- Bridge construction
- Concrete slipways
- Dam spillways and hard standings
- Concrete piles and foundations.

Typical Properties

Silica. SiO ₂ %	>85%
Density	1.350± 0.03 g/cm ³
Solid content %	50%±5%
Loss on ignition. LOI	<6
Retained on Sieve 45 µ m	<10%
Activity index (7d) % (ASTM C311)	>105
Specific surface m ² /g	15-35

Specification Compliance

ASTM C1240 Standard specification for silica fume for use as a mineral admixture in hydraulic cement concrete, mortar, and grout.

BS EN 13263, Silica fume for concrete.

ASTM C311

Packaging

IBC 1000Ltr

Instruction for use Dosage

- As an additive (generally 4 to 12% by mass of cement) to enhance strength and durability of the fresh and/or hardened concrete

Batching and Mixing

X-Mix Slurry 500 can be batched to concrete in liquid form.

- When making concrete with slurry, the material batching sequence must be controlled. The materials, especially the fine cementitious powders, need to be fed into the mixer at a slower rate for better mixing efficiency with the aggregate materials.
- It should never be feed as a slurry into the mixing vessel without aggregate and water already in it. as balling could occur.
- In slurry form, A high speed disperser should be used to prepare the slurry in advance of adding it to concrete. A 50/50 by weight mix of water and X-Mix Slurry 500 is a suitable concentration. Add the slurry to the concrete plant with the dosing water.

Curing

Concrete made with micro silica concrete must be cured in accordance with good concrete practice.

Shelf Life

When stored in its original, unopened Intermediate Bulk Container (IBC), the product can maintain its quality for up to one month. If agitated once a week, its shelf life can extend to a full year. It is essential to protect the container from direct sunlight and frost and to ensure the contents are circulated regularly to preserve the product's integrity.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.ncc.com.eg

Authorized Technical Specialist

Please note that only NCC X-Calibur Authorized Technical Specialists ('ATSS') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.ncc.com.eg for a full list of NCC X-Calibur ATSS.

Datasheet Validity

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.ncc.com.eg to ensure you have the latest version.

Edition:2025

Warranties

NCC X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price.

NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemicals **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** NCC X-Calibur Construction Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.