

FUERZA NAPHEX

HIGH RANGE WATER-REDUCING & SET-RETARDING SUPER PLASTICIZER FOR CONCRETE

FUERZA NAPHEX is a high-performance, **naphthalene-based** superplasticizing admixture formulated to provide substantial water reduction while effectively retarding concrete setting time. It is designed for applications requiring extended workability and controlled setting, while promoting enhanced early-age and ultimate compressive strength. The formulation incorporates high-efficiency water-reducing agents, premium set-retarding components, stabilizers, and performance-enhancing admixtures to ensure consistent concrete rheology, prolonged workability, and superior strength development.

ADVANTAGES

- Provides high-efficiency water reduction with controlled retardation of initial setting, enhanced early-age and ultimate strength development, and significantly reduced slump loss, facilitating extended transportation, handling, and concrete placement operations.
- Particularly suitable for hot-weather concreting where controlled extension of the initial setting time is essential for maintaining workability and placement efficiency.
- Improves initial workability and flow characteristics while enabling the development of high ultimate compressive strength.
- Significantly enhances the compressive, flexural, and tensile strength, impermeability, durability, and overall performance characteristics of concrete.
- Extends the concrete setting time by approximately 1–3 hours, with the retardation period adjustable according to project requirements, without adversely affecting strength development at different curing ages.

STANDARDS COMPLIANCE

Conforms to the performance requirements of **ASTM C494/C494M, Types A, D, and G**, for chemical admixtures for concrete.

TECHNICAL INFORMATION

Supply form:	Liquid
Specific gravity:	1.05
Chloride contents:	Nil
Color:	Dark brown
Freezing point:	0° C

APPLICATIONS & COMPATIBILITY

- **FUERZA NAPHEX** is engineered for the production of high-performance and high-strength concrete, including mass concrete and concrete subjected to prolonged or long-distance transportation, where extended workability and controlled setting characteristics are critical.
- Suitable for concrete applications under ambient temperatures ranging from **+5°C to +40°C**, subject to appropriate mix-design and site conditions.
- Prior to incorporation into cementitious systems containing **anhydrite, metallurgical slag, industrial by-products, or other non-conventional cementitious constituents**, comprehensive compatibility and performance testing should be conducted to verify setting behaviour, workability retention, and strength development.

RECOMMENDED DOSAGE & MIXING

The recommended dosage is **0.5–1.2% by weight of cement**. The optimum dosage depends on the **desired performance characteristics, cement and aggregate quality, water-to-cement ratio, and ambient temperature**; therefore, preliminary **trial mixes** are recommended to establish the appropriate dosage.

The admixture may be incorporated during the **initial mixing or post-mixing stage**. Adequate and prolonged mixing should be maintained to ensure **uniform dispersion and homogeneous distribution** throughout the concrete matrix.

CLEANING

Clean all **tools and application equipment** immediately after use with **clean water** to prevent material residue from drying and accumulating.

TECHNICAL SUPPORT

FUERZA provides comprehensive **technical consultancy and application support** to specifiers, contractors, and end users, including **on-site technical assistance** to ensure proper product selection, application, and system performance.

PACKAGING, STORAGE & SHELF LIFE

FUERZA NAPHEX is supplied in **210-litre drums and 1,000-litre bulk tanks**. It has a **minimum shelf life of 12 months** when stored under cover and protected from **direct sunlight**.

HEALTH & SAFETY

FUERZA NAPHEX is **not classified as hazardous under current applicable regulations**; however, ingestion and contact with **skin or eyes** should be avoided. Wear suitable **protective gloves and safety goggles** during handling. In case of skin contact, rinse thoroughly with water. For eye exposure, **flush immediately with copious amounts of clean water and seek medical attention**. If swallowed, obtain **immediate medical assistance and do not induce vomiting**. Refer to the relevant **Safety Data Sheet (SDS)** for comprehensive safety and handling information.

