PARSMAN CHEMICAL

TECHNICAL DATA SHEET

FLUENTIS® MW-310

Concrete Plasticizer

High water reduction for cold and moderate conditions





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Polycarboxylate ether-based plasticizer
High water reduction for cold and moderate conditions

Description

FLUENTIS® MW-310 from Parsman Chemical is a high-performance, new-generation water reducer developed to meet the needs of concrete producers and users during cold and moderate seasons. It provides suitable slump retention under cold and moderate ambient conditions.

Technical properties

Base material	Polycarboxylate ether
Appearance	Liquid
Colour	Dark brown
Density	1.05 ± 0.02 g/cm³
pH	4-6
Freezing point	Approximately 0°C
Chloride content	Chloride-free
Alkali content	Less than 1%
Recommended dosage	0.2-1.5% by cement mass for normal applications
Standards	INSO 2930-2, Tables 3-1 & 3-2 ASTM C494 Type F EN 934-2

Applications

- Self-compacting concrete (SCC)
- High-strength concrete
- Pumpable concrete
- High-durability concrete
- High-performance concrete (HPC)
- Low-permeability concrete

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Benefits & features

FLUENTIS® MW-310 is a high-performance product based on new-generation polycarboxylates, with the following effects on fresh and hardened concrete:

- **Strong water reduction at equal workability:** substantially increases compressive strength, resistance to water and dissolved chemical ingress, resistance to carbon dioxide penetration, and durability under all environmental conditions covered by EN 206-1.
- **Very strong workability improvement at an equal water/cement ratio:** enables the production of self-compacting concrete.
- **Simultaneous reduction of water and cement** (especially in high-cement-content concrete): improves economy at equal consistency; reduces drying shrinkage, hydration heat and temperature in mass concrete; and increases structural stiffness by reducing cracking.
- Concrete workability retention in cold weather and over long transport distances for up to 1 hour.
- The specific reactivity of polycarboxylates, together with technical and economic optimisation, enables formulations compatible with different cements.
- Enables the production of high-strength concrete ≥ C85.

Application guidance

FLUENTIS® MW-310 is used in concrete production during cold seasons to achieve concrete strength more rapidly. The product is suitable for mix designs with different consistency, exposure and durability classes in accordance with EN 206, offering technical and economic benefits, outstanding quality and durability.

For greater effectiveness, do not use dry aggregates; use aggregates saturated with water. Otherwise, pre-mix dry aggregates with part of the mixing water before the main mixing process.

Add the admixture to the batching-plant mixer together with the water. When added to a concrete truck mixer, mix uniformly for at least 5 minutes.

This product is compatible with the following admixtures and materials:

- Reactive microsilica (silica fume)
- ParsmanChemical® AX100 accelerating admixture for faster setting and strength development in very cold weather.
- Expansive admixtures
- Air-entraining admixtures
- Shrinkage-reducing admixtures
- Curing compounds for exposed concrete
- Conventional form-release oil



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Safety

Before using this product, carefully read the Safety Data Sheet or the safety instructions on the packaging.

Technical support

The Parsman Construction Chemicals technical team is always available to help you use the products correctly and efficiently.

Packaging

Parsman Chemical FLUENTIS MW-310 is supplied in 20-litre jerrycans and 220-litre drums. It can also be supplied in 1,000-litre tanks and bulk tankers.

Storage

The product can be stored for at least 1 year in a dry place, in its original sealed packaging, at temperatures between 5°C and 35°C.

Contact information



Head office

Unit 7, No. 40, 15th Street, Aghazadeh-Fard (Atlas) Street, Mirdamad Boulevard, Tehran, Iran

+98 21 75918 | +98 21 26705735

+98 21 26705763 | +98 21 26705743

+98 21 26705747

info@parsmanchemical.com

Instagram: @parsmanchemical

parsmanchemical.com

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