

Mapeplast N10

Plasticizing admixture for concrete with low slump loss

DESCRIPTION

Mapeplast N10 is a liquid plasticizing admixture for concrete.

WHERE TO USE

Mapeplast N10 is recommended for concrete with medium compressive strength (R_{ck} 20-30 MPa).

Mapeplast N10 is especially recommended for applications which require a retarded rate of cement hydration at early ages. Its principal uses are for:

- ready-mixed concrete (especially in hot weather);
- pumped concrete;
- mass concrete.

Some application examples

In addition to its plasticizing effect, **Mapeplast N10** has a slight retarding action on the hydration of cement and is therefore especially recommended for:

- ready-mixed quality concrete for structures with a compressive strength higher than 20 MPa;
- ready-mixed concrete for watertight structures (with a water/cement ratio no higher than 0.55): purification plants, reservoirs, canals, tunnels, etc;
- mass concrete structures where it is necessary to reduce thermal peaks caused by the heat generated in cement hydration: dams, foundations-mats for high-rise buildings, etc.

TECHNICAL CHARACTERISTICS

Mapeplast N10 is a water solution of active polymers which disperse cement granules with the secondary effect to improve the cohesion and the pumpability of concrete.

APPLICATION PROCEDURE

Mapeplast N10 develops maximum dispersing action when added to the concrete after the other components (cement, aggregates, minerals or fillers and at least 80% of mixing water).

Mapeplast N10 is most effective when cement and aggregate particles are already wet, and least effective when the admixture is mixed with dry solids, especially if porous, which partially absorb it. It is advisable to begin adding the admixture with an automatic dispenser when at least half the water required for the mix has been introduced into the mixer.

Compatibility with other products

Mapeplast N10 is compatible with other products for producing special concrete, and especially with:

- air-entraining agents from **Mapeair AE** range to produce concrete resistant to freeze-thaw cycles;
- **Mapeplast SF**, micro-silica powder admixture for producing top-quality concrete with strength, durability and impermeability;
- fly ash for producing concrete with artificial pozzolan;

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	liquid
Colour:	brown
Specific gravity according to ISO758 (g/cm ³):	1.20 ± 0.03 at +20°C
Specific action:	water reduction and/or improved workability
Collateral action:	slight retarding of initial hydration rate and retention of workability
Classification according to EN 934-2:	water reducing, plasticizing admixture table 2
Classification according to ASTM C494:	type A
Classification according to ASTM C1017:	type I
Chlorides soluble in water according to EN 480-10 (%):	< 0.1 (absent according to EN 934-2)
Alkali content (Na ₂ O equivalent) according to EN 480-12 (%):	< 5.0
pH content according to ISO 4316:	8.5 ± 2.0

- **Form-Release Agents DMA and Mapeform Eco** to demould concrete from formwork;
- **Mapecure** curing compounds to protect concrete from the rapid water evaporation.

DOSAGE

Dosage by weight:

from 0.2 to 0.5 kg per 100 kg of cement. Different dosages from those suggested must be previously tested through concrete trials, in addition to consulting MAPEI Technical Services Department.

PACKAGING

Mapeplast N10 is available in bulk, 200 l drums or in 1,000 l tanks.

STORAGE

Mapeplast N10 can be stored in closed containers and protected from frost for 12 months.

Exposure to direct sunlight can provoke variations of the colour tone without altering the performances of the product.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapeplast N10 is not considered as dangerous according to the current regulations regarding the classification of mixtures. It is always recommended to wear gloves, eyes protection and take the usual

precaution taken when handling chemical products.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

All relevant references for the product are available upon request and from www.mapei.com



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