

Dynamon SX

Superplasticizer based on acrylic polymer for concrete

DESCRIPTION OF PRODUCT

Dynamon SX is an admixture based on acrylic polymer for concrete, belonging to the MAPEI **Dynamon SX** system.

WHERE TO USE

Concretes manufactured with **Dynamon SX** have a high level of workability (consistency class S4 or S5, according to EN 206-1), and are consequently easy to apply when fresh. At the same time they offer excellent mechanical performance when hardened.

Dynamon SX is especially suitable for all applications where there is the need for greater water reduction, along with relatively high mechanical strength at the early stages.

Its performance makes it particularly suitable for manufacturing self-compacting concretes since **Dynamon SX** can ensure high workability.

The main application of **Dynamon SX** is the production of concretes:

- for high mechanical performance with long maintenance of consistency classes;
- for waterproof and durable structures, according to the exposure classed in the EN 206-1 standard;
- with characteristic strength class (R_{ck}) in the range 25-50 N/mm²;
- self-compacting concretes. Together with **Viscofluid SCC/10** or **Viscostar 3K** viscosity modifying admixtures, **Dynamon SX** is suitable for manufacturing self-compacting concretes to accelerate the casting procedure since they can be placed without vibration.

APPLICATION PROCEDURE

Dynamon SX develops maximum dispersing action when added after the other mix ingredients (cement, aggregates, mineral addition or filler and at least 80% of the mixing water) and before **Viscofluid SCC/10** or **Viscostar 3K**.

COMPATIBILITY WITH OTHER PRODUCTS

Dynamon SX admixture is compatible with other products for preparing special concretes, especially with:

- hardening accelerating chloride-free admixtures from the **Mapect** range for reaching very high mechanical strengths at early ages;
- **Viscofluid SCC/10** or **Viscostar 3K**, viscosity modifying admixtures for manufacturing self-compacting concretes;
- **Mapect SF**, silica fume based powder admixture for manufacturing "top-quality" concrete (strength, impermeability, durability);
- **Expancrete**, expansive agent for manufacturing shrinkage compensated concrete;
- fly ash for manufacturing concrete with traditional self-compacting concrete;
- different types of limestone fillers for manufacturing self-compacting concrete and any other type of concrete that requires these fillers;
- **DMA** and **Mapectform Eco** form-release agents, for releasing concrete from formworks;
- curing emulsions from **Mapecture** range to protect form-released concrete structures from rapid water evaporation (floorings).

Our Technical Services Department is available to evaluate which admixture is the most suitable to

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Consistency:	liquid
Colour:	amber
Density according to ISO 758 (g/cm ³):	1.07 ± 0.02 at +20°C
Main action:	increase workability and/or reduction of mixing water
Classification according to EN 934-2:	high range water reducing superplasticizer, tables 3.1 and 3.2
Classification according to ASTM C494:	type F
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 (%):	< 2.5
pH content according to ISO 4316:	6.5 ± 1

manufacture freeze/thaw cycle resistant concretes, depending on the type of cement used.

CONSUMPTION

Dosage by volume:

from 0.5 to 2 l 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

Dynamon SX is available in bulk, 200 l and 25 kg drums, 1000 l tanks.

STORAGE

Dynamon SX can be stored for 12 months in sealed containers; protect from frost. Exposure to direct sunlight can provoke colour tone variations without altering the performance of the product in any way.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Dynamon SX is not considered dangerous according to the current regulation regarding the classification of mixtures. It is recommended to wear gloves and goggles and to take the usual precautions for the handling of chemicals. 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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