

DYNAMON SR 500R

Modified acrylic super-plasticizer for concrete characterized by low water/cement ratio, high mechanical strength and slump retention

DESCRIPTION

Dynamon SR 500R is a chloride-free Superplasticizing admixture based on a modified acrylic polymer.

WHERE TO USE

Thanks to its high workability (S3 or S4 consistency class according to EN 206-1), concrete made with Dynamon SR 500R is easy to lay while fresh and offers very high mechanical performance when hardened.

Dynamon SR 500R is an admixture with superior performance compared with conventional naphthalene sulfonate or melamine sulfonate super-plasticizers and first-generation acrylic admixture regarding their capacity to reduce the amount of water and their workability.

Dynamon SR 500R is particularly suitable for applications where the amount of water must be drastically reduced combined with an acceleration in strength after short curing times and long workability times for various consistency classes.

Its performance also makes it particularly suitable for self-compacting concrete, in that Dynamon SR 500R guarantees high fluidity in cementitious conglomerates. When producing self-compacting concrete, the use of Dynamon SR 500R must be combined with Viscostar 3K IN admixture which are used to modify viscosity, to avoid the risk of segregation and to guarantee that the mix is homogenous, even with very high slump-flow.

Dynamon SR 500R enhanced ready mixed concrete have the following properties:

- High mechanical performance with long maintenance of consistency class;
- Waterproof and durable structures, according to the exposure classes provided by the EN 206-1 standard;
- With concrete nominal strength class F_{ck} higher than 20 N/mm²
- Self-compacting Concrete. Thanks to its properties of free flow and resistance to segregation, when Dynamon SR 500R is used in combination With Viscostar 3K IN admixture to modify viscosity, self-compacting concrete which may be laid without vibrating and with high pouring speeds may be produced.

HOW TO USE

Dynamon SR 500R develops its maximum dispersion action when it is added after all the other components in the mix (cement, aggregates, minerals or fillers and at least 80% of the mixing water).

PERFORMANCE TEST DATA

Aspect	Light Amber colour Liquid
Relative Density	1.080 ± 0.02 at +25°C
pH	> 6
Chloride Ion Content	< 0.2%

TEST CERTIFICATION/APPROVAL

- ASTM C 494
- EN 934-2 T3.1/3.2
- IS 9103:1999
- IS 2645:2003

COMPATIBILITY WITH OTHER PRODUCTS

Dynamon SR 500R admixture is compatible with other products used to manufacture special concrete, and especially with:

- Hardening accelerator admixtures from Mapefast range to reach very high strength values after short curing cycles;
- Viscostar 3K IN viscosity modifier to make self-compacting concrete;
- Mapetard range to produce concrete with very long retention of workability and controlled setting time.
- Mapeplast SF admixture in powder form, made from micro-silica to produce “top quality”, high-strength concrete with good waterproofing and durability properties;
- Expancrete expansive admixture, to produce compensated-shrinkage concrete;
- Fly-Ash to produce conventional self-compacting concrete;
- Lime and other types of fillers for self-compacting concrete and all other types of concrete which require the addition of this component;
- Mapeform and DMA stripping agents used to strip form-work from concrete;
- Mapecure range curing agents to protect concrete structures without form-work against quick evaporation of the mixing water (floors).

CONSUMPTION

Optimum dosage of Dynamon SR 500R should be determined with trial mixes. As a guide, a dosage range of 500 ml to 1500ml per 100kg of cementitious material is normally recommended. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local MAPEI representative.

For addition information on Dynamon SR 500R admixture or on its use in developing concrete mixes with special performance characteristics, contact your local MAPEI representative.

PACKAGING

Dynamon SR 500R is available in 250 kg drums and in IBC/Bulk.

STORAGE

Dynamon SR 500R can be stored for 12 months in sealed containers. Store under cool & shade place, protect from direct sunlight & frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Dynamon SR 500R is not considered dangerous according to the current regulations regarding the classification of mixtures. It is however recommended to use gloves, eyes protection and take the usual precaution taken when handling chemical products.

For further and complete information about a safety use of our product please refer to our latest version of the 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.in and www.mapei.com