

Dynamon SW

Admixture to maintain the consistency of ready-mixed concrete for extended periods

DESCRIPTION OF THE PRODUCT

Dynamon SW is a chemical admixture based on modified acrylic polymer that allows to extend the workability of concrete without affecting the development of its mechanical strength.

WHERE TO USE

Dynamon SW is used mainly in the ready-mixed concrete sector to extend the workability time. It is also used to maintain the same consistency of concrete for longer during hot weather and allow transportation over long distances or to comply with certain technical specifications. The technical properties of **Dynamon SW** make it ideal for preparing special types of concrete and particularly for:

- fluid concrete;
- self-compacting concrete;
- high performance concrete;
- exposed concrete.

TECHNICAL CHARACTERISTICS

Dynamon SW is an admixture made from modified acrylic polymers in water solution with zero formaldehyde content. Thanks to its special molecular structure, the polymer is gradually released in the cementitious system and helps

concrete maintain the same consistency for long time. Once the product runs out of his action and begins the concrete setting, the mechanical strengths at early age develop without delay compared to a control mix.

Dynamon SW combines its excellent ability to maintain workability with a moderate plasticising effect which increases with increasing dose.

HOW TO USE

The product is supplied ready-to-use in liquid form. **Dynamon SW** is more effective if added to wet concrete. It may be added with the mixing water, or with part of the mixing water, after all the other components in the mix (cement, aggregates, mineral admixtures, etc.). After adding **Dynamon SW** we recommend extending mixing time by at least two minutes so that the product is distributed evenly throughout the mix.

COMPATIBILITY WITH OTHER PRODUCTS

Dynamon SW is an acrylic polymer-based product and is compatible with most MAPEI S.p.A. admixtures for concrete. It is strongly recommended not to use the product in combination with a superplasticiser based on naphthalene sulfonate (BNS).

Dynamon SW may be used stand alone in concrete with class of consistency S2 or S3. It should

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	liquid
Colour:	pearly
Density according to ISO 758 (g/cm³):	1.04 ± 0.02 at +20°C
Main action:	extension of workability and reduction of the mixing water
Classification according to EN 934-2:	water reducing/plasticizing admixture according to table 2
Classification according to ASTM C494:	type A
pH according to ISO 4316:	6.0 ± 1.0
Alkali content (equivalent Na₂O) according to EN 480-12 (%):	< 2.0

preferably be used in combination with a super-plasticiser from the **Dynamon** range to achieve higher consistency classes.

Dynamon SW is also compatible with the following products for preparing special concrete:

- viscosity-modifying admixtures from the **Viscostar** and **Viscofluid** range used to make self-compacting concrete;
- set-retard admixtures from the **Mapetard** range;
- **Mapeplast SF**, silica fume-based powdered admixture used in the production of highly durable concrete;
- **Expancrete**, expanding agent used in the production of shrinkage-compensated concrete;
- fly-ash, lime-based fillers, blast furnace slag and Pozzolan;
- form-release compounds from the **Mapeform Eco** range and **DMA** for stripping formwork from concrete;
- curing agents from the **Mapecure** range used to protect concrete against quick evaporation of the mixing water.

Our Technical Services Department is available to advise on the most suitable product from the **Mapeair AE** range to produce concrete resistant to freeze-thaw cycles according to the type of cement used.

Dosage

Dosage in volume

Typical doses are between 0.2 and 2.0 litres every 100 kg of cement. Extra dosages may be used up to 2.5 litres every 100 kg of cement. Different dosage from those recommended must be previously tested in concrete and, anyway, after consulting MAPEI S.p.A. Technical Services Department.

RECOMMENDATIONS

The dosage may change according to the surrounding temperature, the materials used, the mix design and the workability time required by the specifications. The fixed dosage must always be tested before using it in production industrial scale.

PACKAGING

Dynamon SW is available in 200 litre drums, 1,000 litre tanks and in bulk quantities.

STORAGE

Dynamon SW may be stored for 12 months in sealed containers protected from frost. If stored at temperature lower than +5°C the product may crystallise, but if heated up and mixed the technical properties of the product will not be affected. If exposed to direct sunlight the colour of the product may change without affecting its performance characteristics.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Dynamon SW is not considered hazardous according to current norms and guidelines regarding the classification of mixtures. It is recommended to use protective gloves and goggles and to take the usual precautions for handling 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**

Dynamon SW



BUILDING THE FUTURE

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution

6967-8-2016 (GB)