PRODUCT DESCRIPTION
Dynamon XTend is a very effective superplasticizing admixture based on modified acrylic polymers. The product is part of the Dynamon System. This system is based on DPP technology (Designed Performance Polymers) developed by Mapei, where the properties of the admixtures are custom built for different kinds of concrete. The Dynamon System is developed from Mapei’s own composition and production of monomers.

APPLICATION AREAS
Dynamon XTend is specially designed for ready-mix concrete production and can be used to increase the workability for all types of concrete and/or reduce water consumption.

Some special areas of application are:

- Watertight concrete that requires high or very high strength and strict requirement to concrete durability in aggressive environments.
- Concrete with high workability requirements.
- Self-compacting concrete with somewhat longer open times. If necessary, this type of concrete can be stabilised with a viscosity enhancing admixture, such as Viscofluid or Viscostar.
- Frost resistant concrete – in combination with an air entraining agent like Mapeair. The type of air entraining is chosen based on the properties of the other ingredients.
- Concrete for flooring to create a more pliable concrete with greater workability. High dosages of the product and low temperatures can lead to a certain retardation of the concrete.

Dynamon XTend differs greatly from superplasticizing admixtures based on sulphonated melamines and naphthalenes, as well as from first-generation acrylic-based polymers – by having a higher water-reducing effect and a longer open time. The necessary dosage to achieve the desired workability/water reduction will be significantly lower when using Dynamon XTend, than with older types of superplasticizing admixtures.

The time of closing Dynamon XTend is not so important, but the shortest mixing time is generally obtained when adding Dynamon XTend after at least 80 % of the mixing water is added. It is advisable to do some preliminary testing to obtain optimal utilization of the mixing equipment.

PROPERTIES
Dynamon XTend is a water soluble product of active acrylic polymers that effectively disperses cement within the mixture.
This effect can be utilised in three ways:

1. To reduce the amount of mixing water, but at the same time maintain the concrete workability. Lower w/c ratio gives increased strength, reduced permeability and improved durability.

2. To increase workability compared to concrete with the same w/c ratio. The strength remains the same but ease of placement is improved.

3. To reduce both the water and the cement without altering the mechanical strength. Through this method it is possible to reduce costs (less cement), shrinkage (less water) and also the risk of temperature gradients due to the lower heat of hydration. This last effect is particularly important for concrete containing a high percentage of cement.

COMPATIBILITY WITH OTHER PRODUCTS
Dynamon XTend can be combined with Mapei’s other concrete additives, for example accelerators like Mapefast and setting retardants like Mapetard.

The product can also be combined with air entraining agents for production of frost-resistant concrete, Mapeair products. Selecting the type needed is done based on the properties of the other ingredients.

When combining products, it is recommended that testing is done to obtain the desired effect in the mixture. You may also contact our technical department.

DOSAGE
Dynamon XTend is added to achieve the desired effect, strength, durability, workability and cement reduction by varying its dosage between 0.3 and 2.0 % of the amount of cement + fly ash + microsilica.

Higher dosages increase the concrete’s open time, which means the time where the concrete can be worked. A higher dosage and a lower concrete temperature will cause some retardation.

Test mixtures using the selected parameters are always recommended.

PACKAGING
Dynamon XTend is available in 25 liter cans, 200 liter drums, 1000 liter IBC tanks and in tank.

STORAGE
The product must be stored at temperatures between +8 and +35°C, and will retain its properties for at least one year when stored unopened in original packaging. If the product is exposed to direct sunlight, colour variation may occur, but this will not affect the technical properties of the product.

SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION
Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no.

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 web site www.mapei.no.

LEGAL NOTICE
The contents of this Technical Data Sheet (“TDS”) may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.no.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS INCLUDES THE RESPONSIBILITY OF MAPEI.

All relevant references for the product are available upon request and from www.mapei.no.
TECHNICAL DATA (typical values)

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<th>PRODUCT IDENTITY</th>
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<tr>
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<td>Colour:</td>
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<td>Alkali content (Na₂O-equivalents) %:</td>
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