

Dynamon Floor 1

New generation superplasticizer based on acrylic polymers for concrete floors

DESCRIPTION

Dynamon Floor 1 is a superplasticizing admixture based on acrylic polymers especially formulated for making high quality concrete floors.

Dynamon Floor 1 is free of chlorides, is in compliance with the European norm EN 934-2 and is compatible with all types of cement.

WHERE TO USE

Floor concretes manufactured with **Dynamon Floor 1** have a high 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 performances when hardened.

Dynamon Floor 1 is an admixture with superior performances in comparison with traditional naphthalene-sulphonate or melamine-sulphonate based superplasticizers and first generation acrylic admixtures in terms of increased water reduction and extended slump retention.

Dynamon Floor 1 can guarantee a high fluidity, and at the same time produce an important development in concrete setting times and hardening.

The main applications of **Dynamon Floor 1** are:

- ready mix concrete for floors with high mechanical performance;
- ready mix concrete for durable floors according to the exposure class in the EN 206-1 norm;
- ready mix concrete for floors with characteristic strength class R_{ck} 25-50 N/mm².

TECHNICAL CHARACTERISTICS

Dynamon Floor 1 consists of a water solution containing active polymers free of formaldehyde. The polymers can efficiently disperse the cement grains and they can facilitate a rapid development of the first products deriving from the cement hydration.

It is possible to use the dispersing action of **Dynamon Floor 1** in the following three advantageous ways:

- a) to reduce the amount of water at the same workability;
- b) to increase workability at the same water-cement ratio;
- c) to reduce both water and cement at the same

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	liquid
Colour:	amber
Density according to ISO 758 (g/cm ³):	1.34 ± 0.03 at +20°C
Specific action:	increase workability and/or reduction of mixing water, reduction of setting time
Classification according to EN 934-2:	high range water reducing, superplasticizer, set accelerating, tables 3.1, 3.2 and 6
Classification according to ASTM C494:	Type F
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 according to ISO 4316:	6.5 ± 1

water-cement ratio and the same workability.

APPLICATION PROCEDURE

Dynamon Floor 1 develops maximum dispersing action when added after the other mixture ingredients (cement, aggregates, mineral addition or filler and at least 80% of the mixing water).

COMPATIBILITY WITH OTHER PRODUCTS

Dynamon Floor 1 admixture is compatible with other products for preparing special concretes, especially with:

- **Mapeplast SF**, silica fume based powder admixture for manufacturing "top quality" concrete (strength, impermeability, durability);
- **Mapecure SRA 25** shrinkage-reducing admixture and **Expancrete** expansive agent used in the production of concrete using the **Mapecrete System**;
- **Mapeplast PZ 300** powdered admixture for manufacturing concrete with artificial pozzolana and for self-compacting concrete;

- different types of limestone fillers for manufacturing self-compacting concrete and any other type of concrete that requires these fillers;

- Form-release agents from the **Mapeform Eco** and **DMA** ranges;
- **Mapecure** range curing emulsions to protect form-released concrete structures from rapid water evaporation (flooring).

To obtain a freeze/thaw resistant concrete, it is necessary to devise the best solution according to the type of expansive admixture and the type of cement to be used.

CONSUMPTION

Dosage by volume

From 0.8 to 2 litres per 100 kg of cement.

Different dosage, can be recommended by the MAPEI technical assistance according to the type of use.

PACKAGING

Dynamon Floor 1 is available in bulk, 200 l drums, 1000 l tanks.

STORAGE

Dynamon Floor 1 may be stored for 12 months in sealed, protected containers in sealed containers and protect from frost.

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

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Dynamon Floor 1 is harmful if swallowed. It can cause damage to eyes. During application it is recommended to use protective gloves and goggles and to take the usual precautions for handling chemical products. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For further and complete information about a safe use of our product please refer to our latest version of the 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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684-10-2013

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