

ISO FLOW 5000A[®]



High Range Water Reducing Admixture For Concrete With Ultra High Strength

FEATURES

ISO FLOW 5000A[®] is a new generation high range water reducing admixtures based on modified polycarboxylate ether polymers specially formulated for applications where slump retention, high/early strength and durability are required. Concrete mixes containing these premium products can be optimised for delivery in remote locations and use in hot and cold climates. **ISO FLOW 5000A[®]** has a different chemical structure to traditional superplasticizers, as it consists of a carboxylic ether polymer with long side chains. At the beginning of the mixing process, it initiates the same electrostatic dispersion mechanism as a traditional superplasticizer. However, the side chains linked to the polymer backbone generate a steric hindrance, greatly stabilising the cement particles' ability to separate and disperse. Steric hindrance provides a physical barrier (alongside the electrostatic barrier) between the cement grains. This process produces flowable concrete with significantly reduced water content.

STANDARD SPECIFICIFICATIONS

ISO FLOW 5000A[®] conforms to BS EN 934-2 & ASTM C494 Type G

AREAS OF APPLICATION

ISO FLOW 5000A[®] is recommended for all areas of use of high-performance concrete in the ready-mix industry

- The ability to work with an extremely low water/cement ratio allows for the manufacture of high performance concrete with high early (18-24 hours) and final strengths. Concrete of high density, low permeability is also produced highly durable concrete.
- SCC with High early strength concrete without segregation.
- Particularly useful in precast concrete manufacture where early strength gains.
- Improves impermeability and durability of concrete.

containing OPC or SRC cement, micro- silica or silica fume, fly ash (PFA) and ground granulated blast furnace slag (GGBS).

TECHNICAL DATA

Homogeneity	Homogenous
Color	Amber
State	Liquid
Density (20°C)	1.040 ± 0.02
pH-value	5.5 ± 2
Chloride content	chloride free acc.to BS EN 934-2
Alkali content (Na ₂ O equivalent)	< 8.5 mass-%

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The ISOTEC logo consists of the word "ISOTEC" in white, bold, uppercase letters, centered within a red shield-shaped background.

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DOSAGE

Recommended dosage range 0.2 – 4 mass -% of the cement content.

EFFECT OF OVERDOSE

Overdose of **ISO FLOW 5000A[®]** may result in delay of initial setting , higher workability and may result in increased air content.

COMPATIBILITY

ISO FLOW 5000A[®] is suitable for concrete designs

When using other admixtures in the same concrete mixture, the products should be added separately and must not be blended prior to addition.

Using more than one admixture requires suitability and preliminary tests in order to ensure the required combination of its effects is attained.

Store at a temperature above 10° C. If the product is stored at a temperature below 10° C, some f lakes may appear. The product will recover its properties after a long storage at a temperature above 10° C and light agitating.

Do not store the product at high temperatures over a long period of time.

WORKING PRINCIPLE

ISO FLOW 5000A[®] improves the cement dispersion within the concrete significantly. This property allows the formation of a homogenous and low viscosity cement paste which ensures an improved workability and facilitates the compaction of concrete.

METHOD OF USE

It is preferable to add **ISO FLOW 5000A[®]** after adding 60% of the water to the concrete, or at the end of mixing. In forced action mixers the mixing time should be at least 60 seconds per m³.

PRECAUTION

ISO FLOW 5000A[®] should not be used in conjunction with any naphthalene based admixture.

PACKAGING

ISO FLOW 5000A[®] is available in IBC and other pack size.

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STORAGE

Store under cover, out of direct sunlight and protect from extremes of temperature.

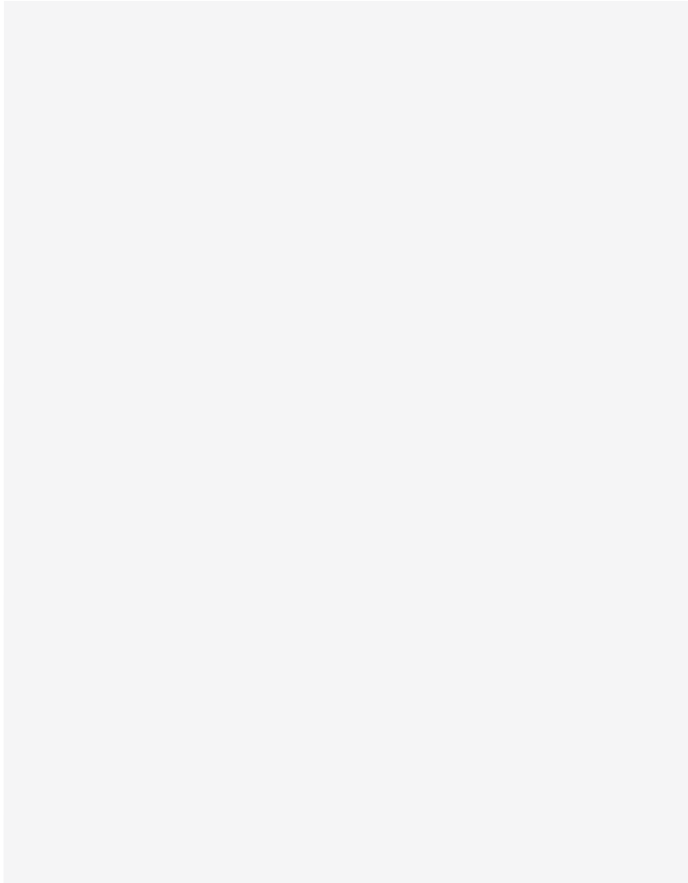
Shelf Life

Approx. 1 year from date of production if stored properly.

HEALTH, SAFETY & ENVIROMENT

ISO FLOW 5000A[®] is classified as non hazardous according to the CLP regulations.

See safety data sheet for further information.



Legal Notes

The information provided in this data sheet, are given in good faith based on our current knowledge and experience of the product when properly stored, and applied by professional applicator, and under normal conditions in accordance with the mentioned recommendations. In practice under actual site condition differences are such that no warranty can be issued nor any liability can be taken, arising out of any legal relationship whatsoever. The product must be tested onsite to check its suitability for the intended application and purpose



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