Product Data Sheet
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Construction

Sikament®-G4200

Very High Range Water-Reducing and Slump Retaining Concrete Admixture

Product Description	**Sikament®-G4200** is a highly effective dual action liquid super-plasticizer for the production of free flowing concrete or as a substantial water-reducing agent for promoting high strength concrete. It imparts excellent slump retention for prolonged periods. **Sikament®-G4200** is especially suitable for use in concrete mixes containing micro-silica and other pozzolanic materials like GGBS and Fly Ash. This product is suitable for tropical and hot climatic conditions.
Uses	**Sikament®-G4200**is used as a superplasticizer in the production of free flowing concrete such as in - Slabs and foundations. - Walls, columns and piers - Slender components with densely packed reinforcement. - Piles. It is also used as a water-reducing agent for production of high early strength concrete such as in - Precast concrete. - Pre-stressed concrete. - Bridges and cantilever structures**.**
Advantages	**Sikament®-G4200** provides the following properties : As a super plasticizer - Workability is greatly improved. - Concrete is placed easily, especially suitable in slender components with densely packed reinforcement. - Concrete requires less vibrating. - Improved cohesion of the concrete mix reduces significantly the risk of segregation and allows greater time for placement. As a water reducer - Up to 35% water reduction. - Final strength improved up to 40% at max. possible water reduction.

Tests

Approval/Standards	**Sikament®-G4200** complies with ASTM C-494 Type F & G and EN 934-2

Product Data

Form	Liquid
Appearance / Colour	Brownish
Packing	1000 lt. flow bins. Bulk supply in tanker trucks is possible on request

Storage

Storage Conditions	Store in dry conditions and at temperatures between +5°C and +35°C. Protect from direct sunlight and frost. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
Shelf Life	12 months from date of production if stored properly in undamaged and unopened original sealed containers.

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Technical Data

Chemical Base	Sulfonated Naphthalene based polymer.	
Density (at 20°C)	Approximately 1.205 kg/l (ASTM C-494)	
Chloride Content	Nil	(EN 934-2)

Application Details

Dosage	Recommended dosage: 0.6 – 3.0 % by weight of cement (binder). Trial mixes must be done to establish the correct dosage.
Compatibility	**Sikament®-G4200** may be combined with many other Sika Products particularly ▪ SikaFume® ▪ Sika Retarder® and Sika® Retardol-25 ▪ Sika-Aer® ▪ Sika® Ferrogard®901 Trials must be performed before combining products in a concrete mix. Contact our Technical Services Department for information about specific combinations.
Dispensing	**Sikament®-G4200** is added to the gauging water at the plant or added on site into the concrete mixer. Allow enough time for the concrete to mix thoroughly. For Ready-mix concrete, **Sikament®-G4200** is added to the concrete immediately prior to discharge and there after further mixing must take place for at least three minutes.
Concrete Placing	The standard rules of good concreting practice, concerning production and placing, are to be followed. Refer to relevant standards.
Curing	Fresh concrete must be cured correctly, especially at high temperatures in order to prevent plastic and drying shrinkage. Use Sika Antisol® products as a curing agent or apply wet hessian.
Cleaning	Clean all equipment and tools with water immediately after use.
Application Notes / Limitations	When accidental overdosing occurs, the set retarding effect increases and additional air is entrapped. During this period the concrete must be kept moist in order to prevent premature drying out. When using **Sikament®-G4200** a suitable mix design must be selected and local material sources must be trialed. **Sikament®-G4200** must not be added to dry cement. Before pouring, suitability tests on the fresh concrete must be carried out. Due to the extended workability, take special care that formwork is properly installed and secured. If frozen, gradually thaw out and agitate until completely homogenised. Prolonged storage at temperatures > 35°C is not advisable
Transport	Non-hazardous.
Safety Precautions	Contains material, which may in certain cases cause skin irritation: Cleanliness is required. In case of skin contact, wash thoroughly with soap and water: In case of eye contact, flush with water for 15 minutes, contact a Physician: wash clothing before re-use.
Toxicity	Non-Toxic under relevant health and safety codes.

Legal notes

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