



SIDHYA ASIA
CHEMICAL PRIVATE LIMITED



PRODUCT DATA SHEET

Sidhya® Rheo Crete 115 AE

Air Entraining Admixture for Concrete Application.

Description

Sidhya® Rheo Crete 115 AE is a unique product which is designed for light weight concrete with low density. Sidhya® Rheo Crete 115 AE produces entrapped air which are homogenously distributed in the concrete by reacting at the interface between mixing water and cement/aggregate particles. The entrained air reduces the density of the concrete and enhances the resistance of concrete during rapid temperature changes in freezing conditions. Sidhya® Rheo Crete 115 AE improves the fresh concrete properties and optimizes the workability, bleeding and segregation tendencies.

Applications

Sidhya® Rheo Crete 115 AE is an air entraining admixture which produces microscopic air bubbles in concrete during wet mixing in batching plants. The product improves the fresh concrete properties and prevents segregation and bleeding and hence can be used for the below applications:

- Production of light-weight screed.
- Production of high-quality freeze-thaw resistance concrete.
- Production of light weight precast elements.
- Promotes production of high-quality light weight concrete for insulation.
- Can be used in plastering applications.

Mixing

Sidhya® Rheo Crete 115 AE should be added to the fresh concrete after all the mix ingredients has been added to mix. It is recommended to use high shear mixers and blend for one minutes. The correct quantity of Sidhya® Rheo Crete 115 AE should be measured by means of a recommended dispenser.



Technical Specifications

Chemical Base	Surface active agent
Color	Colorless to Yellowish
Appearance	Homogenous
State	Liquid
Specific Gravity	1.01 ± 0.02 @ 20°C
pH	Minimum 6.0
Chloride Ion Content	<0.10%
Alkali content	<1.5 g Na ² O equivalent / liter of admixture.
Shell Life	12 months from the date of manufacturing if stored as per recommendations and original sealed packing.

Advantages

Sidhya® Rheo Crete 115 AE is an air entraining admixture which induces entrapped air in concrete which improves the concrete rheology and prevents cement particles washing out and hence providing the following advantages:

- Reduces the segregation and bleeding problems by improving cohesion.
- Increases the freeze thaw resistance of concrete.
- Improved workability of concrete and mortar mixes.
- Improves the insulation of concrete from Sound and heat.
- Improves the fire resistance of concrete.
- Improvement in cohesiveness of concrete.
- Improves the durability of concrete.
- Reduces water content without loss of workability in concrete.

Dosage

The recommended dosage of Sidhya® Rheo Crete 115 AE should be between 0.2 % to 2.0% by weight of cementitious. Effects of over dosage can delay the setting time. Increase in dosage may lead to severe reduction in compressive strength and air content should be considered while designing the concrete mix.

The optimum dosage of the Sidhya® Rheo Crete 115 AE should be determined by preliminary trials at site. The dosages above recommendations can be used if agreed by the client and consultant for special applications along with consultation of Sidhya® technical team.

Compatibility

Sidhya® Rheo Crete 115 AE is compatible with all types of cement and binders such as GGBS, Ultra Fine GGBS, Micro silica, Fly ash and Metakaolin. Sidhya® Rheo Crete 115 AE when using along with other Sidhya® products should be added separately and must not be blended prior to addition.



Technical Compliances

Sidhya® Rheo Crete 115 AE conforms to the requirements of IS 9103: 2007, ASTM C260-81 & BS 5075 Part 2, BS 4887 Part 1.

Storage

Sidhya® Rheo Crete 115 AE AW has a shelf life of 12 months provided the temperature is kept between +1.0°C to +50.0°C. Please contact Sidhya® technical team if the product falls outside the temperature range.

Packaging

Sidhya® Rheo Crete 115 AE is available in 200 liters drums, 1000 litres IBC and bulk tanker. Please contact our Sales Representative for customized packing and more details

Legal Notice

The recommendations related to the application and recommendations are given in good faith based on Sidhya's current experience and knowledge of the products. The benefits stated about the product are only applicable if guidelines provided by Sidhya for storing, handling and mixing are followed under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product is always advised to test the product's compatibility and suitability for the intended requirements and application. Sidhya reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned copies of which will be supplied on request.

Sustainability, Health and Safety

End use of the product must read the Material Safety Data Sheet (MSDS) of the product. The MSDS provides information and advice on storage, handling and disposal of the product and instructions related to physical ecological, toxicological and other safety related data.

Product Data Sheet

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Sidhya® Rheo Crete 115 AE
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