



**SIDHYA ASIA**  
CHEMICAL PRIVATE LIMITED



## PRODUCT DATA SHEET

### Sidhya® Rheo Crete 1000 AW

*Powder Viscosity modifying agent for cementitious application.*

#### Description

Sidhya® Rheo Crete 1000 AW is a unique product which is designed for increasing the viscosity of cementitious paste in concrete/grouting applications. The product increases the cohesiveness of the cementitious system and prevents cement particles from washing away during underwater concrete and grouting applications. Sidhya® Rheo Crete 1000 AW modifies the rheology of the cementitious system and develops a highly dense, viscous and cohesive mix. The product promotes high compressive strength and reduction in concrete bleeding during SCC application.

#### Applications

Sidhya® Rheo Crete 1000 AW is an viscosity modifying admixture designed for high workable concrete and grout systems during long pumping requirement and underwater applications. The product improves the fresh concrete properties and prevents cement particles from washing away and hence can be used for the applications below:

- Production of Self Compacting Concrete.
- Production of high-quality cohesive grout.
- Production of high-quality cohesive concrete.
- Promotes reduction in bleeding and can be used for long haul concrete.
- Promotes high durability requirements.
- Improves the placement of concrete in tremie operations.
- Can be used in concrete applications in foundation rock layers in high water table.

#### Mixing

Sidhya® Rheo Crete 1000 AW should be added to the fresh concrete after all the mix ingredients has been added to mix. Addition of Sidhya® Rheo Crete 1000 AW into concrete too early can lead to clumping and gelling of mix. It is recommended to use high shear mixers and blend for two minutes. Insufficient mixing may lead to bleeding and segregation.



### Technical Specifications

<b>Color</b>	White
<b>Appearance</b>	Homogenous
<b>State</b>	Powder
<b>Specific Gravity</b>	1.50 ± 0.03 @ 20°C
<b>pH [0.5% solution in water]</b>	Minimum 6.0
<b>Loss on Ignition</b>	< 15.0%
<b>Particle size 200 mesh passing [%]</b>	Minimum 92.0%
<b>Shell Life</b>	12 months from the date of manufacturing if stored as per recommendations and original sealed packing.

### Advantages

Sidhya® Rheo Crete 1000 AW is a Viscosity modifying powder admixture which improves the concrete rheology and prevents cement particles bleeding out and hence provides the following advantages:

- Reduces the segregation and bleeding problems by improving cohesion.
- Eliminates the need for dewatering of underwater construction sites.
- Concrete can be easily placed by Tremie operation.
- Segregation and dilution of cementitious reduces during high ground level applications.
- Improvement in workability and retention time.
- Improvement in cohesiveness of concrete.
- Improves the durability of concrete.
- Decreases the water permeability significantly.
- As the product prevents cement loss, hence enhances compressive strength of concrete.

### Dosage

The recommended dosage of Sidhya® Rheo Crete 1000 AW should be between 0.05 % to 0.60% by weight of cementitious. Effects of over dosage can delay the setting time and lead to gelling of concrete/grout properties.

The optimum dosage of the Sidhya® Rheo Crete 1000 AW 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 1000 AW is compatible with all types of cement and binders such as GGBS, Ultra Fine GGBS, Micro silica, Fly ash and Metakaolin. Sidhya® Rheo Crete 1000 AW when using along with other Sidhya® products should be added separately and must not be blended prior to addition.



### Technical Compliances

Sidhya® Rheo Crete 1000 AW conforms to the requirements of IS 9103: 2007, ASTM C494 & BS EN 934-2.

### Storage

Sidhya® Rheo Crete 1000 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 1000 AW is available in 600 kg jumbo bags , 25 kgs bags and bulker. 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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✉ [info@sidhyaasia.com](mailto:info@sidhyaasia.com)

🌐 [www.sidhyaasia.com](http://www.sidhyaasia.com)

📍 No. 18/2A2, Nallur Village, Sholavaram, Chennai 600067, Tamil Nadu, India.

📍 526/10 (560/1A), Centuary Plaza Anna Salai, Teynampet, Chennai 600018, Tamil Nadu, India.

