Technical Information

Rheovis® FRC

Cationic acrylic polymer based on
“Liquid Dispersion Polymer Technology”.

We create chemistry

Chemical nature	Cationic acrylic polymer based on “Liquid Dispersion Polymer Technology”.
PRD-No.*	30478270 * BASF’s commercial product numbers.
Appearance	Rheovis® FRC is a milky, viscous dispersion at 23 °C.

Handling and Storage

Handling

a) Rheovis® FRC should be stored in a dry place in its original sealed packaging.

b) It is advisable to tightly seal any opened container if they have only been partly emptied.

c) The storage temperature must be between min. +5 °C and max. +30 °C. Storage temperatures below +5 °C cause the product to solidify. This is reversible for Rheovis® FRC product by gradually heating back to room temperature. The product Rheovis® FRC is freeze/thaw stable. This is not detrimental to the product, its properties or its efficiency performance.

d) Rheovis® FRC should be mixed prior to use into the production process to ensure a homogeneous product blend and maximum product efficacy.

e) Mixing can best be achieved by utilizing a drum roller to mix the product. Care should be taken, not to induce air into the product. If a blade type mixer is used, adjust the agitator speed so, that there is a uniform mixing of the product without creating a vortex.

f) All partial drums of Rheovis® FRC should be resealed with the original drum lid and stored off the floor.
When reusing partial drums they must be remixed prior to use.

g) Usage, preferably, the total content of a packing unit should be processed at once. If this is not possible, the material should be mixed before further use.

h) If samples of Rheovis® FRC are required for analytical testing, they must be taken from thoroughly mixed drums. Samples should be taken from the middle of a drum of homogeneous product to ensure accurate test results.

i) Rheovis® FRC as supplied is slippery and may present a slip, trip or fall hazard in the workplace if spilled. Spills of Rheovis® FRC Liquid Dispersion Polymers should be absorbed onto sand or other absorbent material and shovelled into sealed containers for proper disposal in accordance with local, state and federal regulations.

j) Rheovis® FRC can be pumped into the manufacturing process to allow continue processes/ease of handling. To ensure ease of pumping it is recommended that a pump is used that does not allow constricted high shear flow of product through narrow outlets. The pump should preferably used at low strokes and not be used at full power. This allows limited heat generation and ease of process of pumping Rheovis® FRC.
Recommended pumps to be used with Rheovis® FRC are of a progressive cavity type and not of a check ball diaphragm type. It should be insured that the type of elastomers used by the pumps are of an inert type. This ensures no reaction of Rheovis® FRC with the elastomers. Examples of such material can be PTFE based. PTFE is inert in that it stops reaction of the oils & solvents in Rheovis® FRC to react with causing the need to frequently changing the elastomer.

k) It is critical to control the flow angle of Rheovis® FRC into a formulation. Preferably Rheovis® FRC should be added down stream for a continuous process. For a batch process also Rheovis® FRC should be added into the formulation from the top of the mixing vessel with continuous stirring.
This allows the most effective micro particulate thickening mechanism.

l) Due to the chemical nature of the product we advise that prior to any pumping or homogenization processes that all equipment used is thoroughly clean.

m) Please refer to the latest Safety Data Sheet for detailed information on product safety.

Materials

Suitable materials to store this product is:
a) HDPE – high density polyethylene

Shelf life

Rheovis® FRC has a total shelf life of at least 12 months from the manufacturing date, if kept in the original unopened packing at consistent temperature (25 °C).

Properties

Some physical properties are listed in the table below. These are typical values only and not all of them are monitored on a regular basis. They are correct at the time of publication and do not necessarily form part of the product specification. A detailed product specification is available on request or via BASF's WorldAccount: https://worldaccount.basf.com (registered access).

Rheovis® FRC	Unit	Value
Physical form (23 °C)		dispersion
Odor		product specific
Concentration (dry content) (ISO 3251, 5 g, 110 °C, 1 h, share insoluble in acetone)	%	approx. 55
pH value (DIN 19268)	%	approx. 3.5
Viscosity (ISO 2555, Brookfield LVT, 23 °C, spindle 2, 60 rmp)	mPa·s	approx. 250
Density (DIN 51757, 23 °C)	g/cm^3	approx. 1.03

Solubility

Water solubility (10 mg/L dry substance in demin. water), after 1 h: soluble, slightly opaque.

Safety

We are not aware of any ill effect that can result from using Rheovis® FRC for the purpose for which it is intended and from processing it in accordance with current practices.

According to the experience that we have gained over many years and other information at our disposal, Rheovis® FRC does not exert harmful effects on health, provided it is used properly, due attention is given to the precautions necessary for handling chemicals, and the information and advice given in our Safety Data Sheets are observed.

Labelling

Please consult the current Safety Data Sheets for information on the classification and labelling of our products and other information relevant to safety.

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