

RHEOLATE® 208

Powdered Thickening Agent - Polyether Urea Polyurethane-Based 100 % Solids Associative Rheology Modifier for Latex Paints and Other Water-Borne Systems

GENERAL INFORMATION

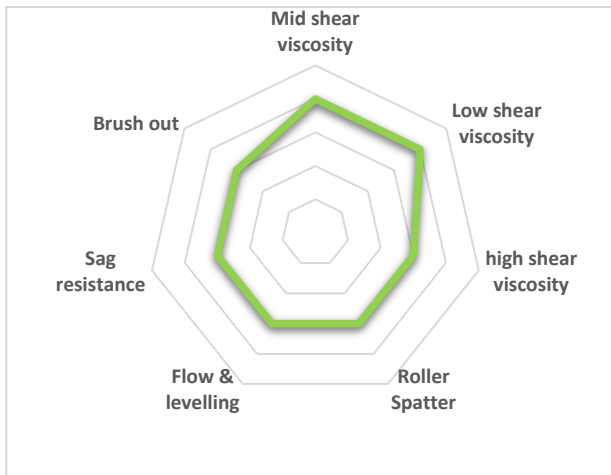
RHEOLATE 208 rheological additive is a 100% solids urethane associative thickener developed for use in aqueous systems. The product is supplied as a white free-flowing powder and enables formulations of odourless paints free of organic solvent.

Furthermore, it is free of APEO and biocide and allow to develop sustainable solutions in coatings and adhesives. It improves values in ECO-label- and other certificates. The product is suitable for anti-asthma and anti-allergy paints.

RHEOLATE 208 is an additive with superior thickening effect – it provides a balanced rheological profile contribution low-, mid- and high shear range.

RHEOLATE 208 is designed for use in paints containing small-particle-size latex emulsions and in high-volume-solids systems.

RHEOLATE 208 provides benefits additional to those of its liquid counterpart RHEOLATE 278 TF.



CHEMICAL & PHYSICAL PROPERTIES

Appearance 20 °C	white, finely divided powder
Active content	99 - 100 %
Density (bulk) 20 °C (ISO 2811-2)	0.430 – 0.485 g/cm ³
Solubility	soluble in water and water/glycol mixtures
Composition	polyether urea polyurethane
Melting point [°C]	54 - 57
Non-volatile content	100 %

These are typical properties not to be used for specification purposes.

APPLICATIONS

- Thickener for sustainable aqueous coatings / adhesives
- High quality, low VOC latex paints of all sheen levels
- High-gloss interior and exterior latex paints
- Semi-gloss interior and exterior latex paints
- Waterborne alkyd paints
- Other latex systems requiring high film build and improved flow and leveling
- Inks
- Adhesives
- Textile coatings

KEY PROPERTIES

100 % solids powder

- APEO-, VOC-, tin-, biocide free
- contains no coalescing solvent
- offers greater manufacturing flexibility
- reduces formulation interaction
- easily stored
- non-freezing

Excellent rheology

- balanced rheological profile contributing to low-, mid- and high shear
- Can be used as stand-alone thickener in formulations
- enhances film build

Excellent paint performance

- bio-stable
- develops pH-independent rheology
- gives excellent brush drag
- has excellent flow and leveling
- reduces spattering during roller application
- reduces influence on color acceptance and color stability
- gives alkyd-like appearance in water-borne gloss paints

Compatibility

- compatible with BENTONE EW, BENTONE LT and other rheological additives

continued...

RHEOLATE[®] 208

- allows broad formulating flexibility

INCORPORATION

RHEOLATE 208 is best incorporated pre-dispersed as a water gel.

The method of pre-mix is:

Water 96 parts

RHEOLATE 208 4 parts

Mix at moderate speed for 15 minutes.

In some cases a glycol pre-mix can be used.

Pre-mix Addition

No specific order of addition is required and the pre-dispersion may be used as the last ingredient of letdown. Addition before letdown of the mill-base is strongly recommended.

It is important to adjust the final water level in the formulation to compensate for the water added via the pregel.

Dry addition

Under the right conditions **RHEOLATE 208** may also be used as a dry addition to the mill-base

Dry addition to mill-base:

Low-solids mill-base

- 1) water
- 2) **RHEOLATE 208** mix 15 minutes minimum
- 3) additives
- 4) pigments/fillers disperse
- 5) latex
- 6) remainder of letdown

High-solids mill-base

- 1) water
- 2) additives
- 3) pigments/fillers disperse
- 4) **RHEOLATE 208**
- 5) latex
- 6) remainder of letdown

LEVELS OF USE

Typical use levels of **RHEOLATE 208** are 0.1% to 0.6%, as delivered, on the total paint weight. Since the rheological properties result from the association with specific coatings raw materials, **RHEOLATE 208** must be evaluated in the complete paint formulation to determine its performance. To achieve optimum properties, the system's surfactant blend may need modification.

HEALTH AND SAFETY

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

STORAGE RECOMMENDATIONS

It is recommended to store **RHEOLATE 208** in dry conditions. Although internal tests have shown that powder thickener are less sensitive storing temperature, we recommend to store preferably temperatures in the range of 4°C (40°F) to 35 °C (95°F). In the event of accidental freezing, it has to be considered that incorporation time is prolonged. Pretesting in the lab is recommended.

SHELF LIFE

RHEOLATE 208 has a shelf life of 2 (two) years from date of manufacture.

QUALITY ASSURANCE

Quality system at the site manufacturing this product complies with and is certified to ISO 9001 quality standards stipulated standards.

NOTE: The information herein is currently believed to be accurate. We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document.

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