



Technical Data Sheet

DEUTERON SR 28

Thickener based on Xanthagalactomannan

Deuteron[®]
ADDITIVES TO YOUR SUCCESS

■ Product Characteristic

Appearance	yellow powder
Bulk density	approx. 740 g/l
Viscosity (1 % in water)	approx. 3400 mPa*s

■ Product Description

Deuteron SR 28 is a natural biopolymer based on polysaccharides. It is soluble in cold and hot water and results in pseudoplastic solutions. Solutions based on Deuteron SR 28 tolerate a wide temperature and pH range. At pH levels < 2 and > 12 depolymerisation and thus a decrease in viscosity can occur.

Deuteron SR 28 solutions tolerate the presence of up to 40 % of organic solvents such as alcohols or glycol ethers. Deuteron SR 28 is insoluble in pure organic solvents.

Deuteron SR 28 is stable in anionic and non-ionic systems. In cationic systems it may come to incompatibilities.

Deuteron SR 28 creates a strong structure viscosity. The viscosity decreases when the shear force is increased. It quickly returns to the base viscosity when the shear force is removed. This prevents settling of pigments and fillers and separation of the liquid phase during storage. It also makes application easier by stabilising the sagging behaviour. The product is compatible with most commonly-used binders and thickeners used in the coating industry.

■ Applications

Deuteron SR 28 is suitable for the following applications:

- › General viscosity adjustment
- › Reduction of floating / settling of waxes and pigments
- › Improved stability / anti-sagging
- › Preparation of stable gels



Deuteron SR 28 especially improves performance in:

- › Water-based coatings and printing inks
- › Pigment concentrates
- › Emulsion paints and plasters
- › Water based adhesives
- › Food processing

■ Dosage

The required addition level depends on the requirement / target properties:

- | | |
|---|--------------|
| a) Thickening / Gel formation: | 0.1 - 0.75 % |
| b) Stabilisation of solids against sedimentation: | 0.05 - 0.2 % |
| c) Anti-sagging: | 0.1 - 0.3 % |



Technical Data Sheet

DEUTERON SR 28

Thickener based on Xanthagalactomannan

Deuteron[®]
ADDITIVES TO YOUR SUCCESS

■ Processing

Due to its rapid hydration, Deuteron SR 28 tends to form lumps. To ensure a proper dispersion it is recommended to add Deuteron SR 28 slowly while stirring. Once everything is added stir at a high shear rate until complete dispersion is achieved. As soon as the viscosity of the solution increases, the speed should be reduced to avoid foam formation. Usually a proper dispersion takes 20-30 minutes.

For easier incorporation it is possible to develop an easy to use intermediate product. Therefore, Deuteron SR 28 can be mixed with a glycol / glycoether or alcohol of choice (ration approx. 1:1) and dispersed to a high viscosity suspension.

Thickener solutions based on polysaccharides should be stabilized against fungal and bacterial growth with a suitable biocide. All broad range biocides used in the paint industry are suitable.

■ Storage Conditions

24 months at room temperature and dry conditions.
Storage temperature should not exceed 35 °C.
The relative humidity should not exceed 70 %.

■ Package Sizes

Paper bags (25 kg net)

■ Safety

According to Regulation (EC) No. 1272/2008
Deuteron SR 28 is not classified as a dangerous product and therefore does not need to be labelled.

For detailed information please refer to the Safety Data Sheet and Regulatory Information Sheet. The documents are also available on our website:

<https://www.deuteron.com/en/download-center/>

■ Deuteron: First class products for the coating industry

Deuteron GmbH successfully develops and sells innovative additives since 1977. Our product range consists of matting agents, anti-static additives, texturing additives, thickeners and UV initiators. In the course of our company history we have become an important partner of the national and international paint, lacquer and coating industry with sales partners around the globe.

This leaflet intends to give technical advice without warranty and does not claim to be complete.



DEUTERON GmbH
In den Ellern 2-4
28832 Achim, Germany

Phone: +49(0)421 48 99 03-0
Fax +49(0)421 48 99 03-60

Mail contact@deuteron.com
URL www.deuteron.com

© 10.21 EN
081-122127