



Technical Data Sheet

DEUTERON VT 920

Granulated thickener based on Xanthan gum

Deuteron[®]
ADDITIVES TO YOUR SUCCESS

Product Characteristic

Appearance	white granules
Bulk density	approx. 500 g/l
Viscosity (1 % in water)	approx. 2200 mPa*s



Product Description

Deuteron VT 920 is a natural biopolymer based on polysaccharides. It is soluble in cold and hot water and results in pseudoplastic solutions. Solutions based on Deuteron VT 920 tolerate a wide temperature and pH range. At pH levels <2 and >12 depolymerisation and thus a decrease in viscosity can occur.

Because of the granulated supply form Deuteron VT 920 is easy to use and does not require high shear forces for proper incorporation. Solutions of Deuteron VT 920 tolerate the presence of up to 40 % of organic solvents such as alcohols or glycol ethers. Deuteron VT 920 is insoluble in pure organic solvents.

Deuteron VT 920 is stable in anionic and non-ionic systems. In cationic systems it may come to incompatibilities.

Deuteron VT 920 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 VT 920 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 VT 920 especially improves performance in:

- › Water-based coatings and printing inks
- › Pigment concentrates
- › Emulsion paints and plasters
- › Water based adhesives
- › Cleaning products
- › Food additive
- › Pharma

Dosage

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

- | | |
|---------------------------------------------------|-------------|
| a) Thickening / Gel formation: | 0.1 - 1.0 % |
| b) Stabilisation of solids against sedimentation: | 0.1 - 0.3 % |
| c) Anti-sagging: | 0.1 - 0.5 % |



Technical Data Sheet

DEUTERON VT 920

Granulated thickener based on Xanthan gum

Deuteron[®]
ADDITIVES TO YOUR SUCCESS

■ Processing

Due to the granulated delivery form, Deuteron VT 920 can be added dust-free and without lumps. It is recommended to add Deuteron VT 920 while stirring and stir at a moderate speed until complete solution. Usually it takes 10 - 15 minutes until proper dispersion. Higher shear force accelerates the dispersion process.

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

Cardboard box with plastic liner (15 kg net)

■ Safety

According to Regulation (EC) No. 1272/2008 Deuteron VT 920 is not classified as a dangerous product and therefore does not need to be labelled.

Deuteron VT 920 also meets the requirements of the Food Chemical Codex (FCC), the criteria of the EU (E415), 21 CFR § 172.695 (USA), the JECFA guidelines, the European Pharmacopoeia (Ph.Eur.), the US Pharmacopoeia (USP), and Japan's specifications and standards for food additives.

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
081-122144