

# DEUTERON SR 28

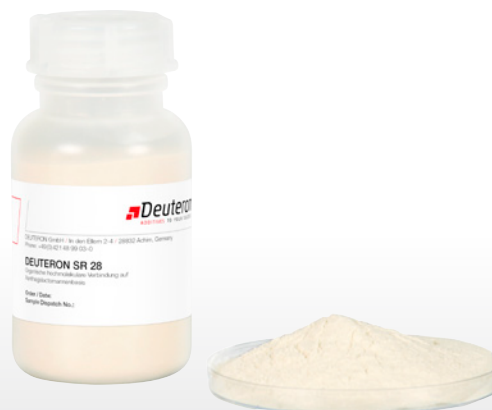
Thickening and thixotropic agent for aqueous systems

## / Chemical Description

Organic high-molecular polymer compound  
(based on xanthagalactomannan)

## / Physical Data

Deuteron	SR 28
Bulk Density approx.	740 g/l
Viscosity of a 1 % solution approx.	3400 mPa-s
Appearance	light free-flowing powder



## / Properties

Deuteron SR 28 is a mixture of natural biopolymers based on polysaccharides. It is soluble in cold and hot water and yields very high-viscosity, shear thinning solutions even when small amounts are used.

Deuteron SR 28 shows good compatibility with acid and with alkali conditions. A change in the pH value will influence the viscosity to a lesser degree than the gel strength. The solutions are pH and temperature stable. There is almost no change in viscosity from pH 2 - 12. The temperature has relatively less influence on the viscosity of a solution of Deuteron SR 28.

Solutions of Deuteron SR 28 tolerate high quantities of water-miscible solvents, e.g. alcohols and glycols.

Deuteron SR 28 is stable in anionic and non-ionic systems. In cationic systems, it is not always compatible.

Deuteron SR 28 prevents settling of pigments and fillers and separation of the liquid phase during storage. Application is made easier through pronounced structural viscosity. The viscosity sinks when the shear force is increased. It rapidly returns to the starting value when the shear force is removed. The product is compatible with most commonly used binders and thickeners used in the coating industry.

## / Application

Deuteron SR 28 is suitable for use as a thickener and stabilising additive for all aqueous coating systems and technical applications such as water-

thinnable lacquers, dispersion paints and plasters, glues, printing inks, silicon paints as well as pigments and filler preparations.

## / Dosage

Depending on the requirement 0.1 - 0.5 % calculated based on the water content.

Solutions should not contain more than 1 % Deuteron SR 28. Considerably higher concentrations ensure no homogenous dispersion.

## / Processing

Due to the rapid hydrating Deuteron SR 28 tends to form lumps. In order to prevent this, the additive should be added very slowly and evenly. For this reason, high shear force is required. As soon as the viscosity increases, the revolution speed should be continuously reduced in order to prevent the formation of bubbles. Building up the viscosity depends on the agitation time and the shear force.

Deuteron SR 28 can be prepared either as a solution using the water available during the manufacturing process or directly dispersed into the finished product to adjust the viscosity. Good results of incorporation can also be achieved if the required quantity of Deuteron SR 28 is combined with glycol as a 1:1 mixture.

### **/ Conservation**

Solutions of Deuteron SR 28 should be preserved if they are to be stored for more than 24 hours. Compatibility is given with preservatives which are common in the paint industry.

### **/ Storage conditions**

Deuteron SR 28 can be stored for at least 24 months at room temperature and dry conditions. Deuteron SR 28 should be stored cool (max. 30°C) and dry (max. 70% relative humidity) in closed packages.

### **/ Gebindegröße**

Paper bags (25 kg net)

### **/ Safety Regulations**

According to Regulation (EC) No. 1272/2008 Deuteron SR 28 is not classified as a dangerous product and therefore does not need to be labeled. Due to the fine fractions of the product, measures for dust protection must be heeded and the build up of electrostatic charge must be avoided.

### **/ Thickening and Thixotropy Agents from our portfolio**

Deuteron VT 910  
Deuteron VT 920  
Deuteron VT 930

Deuteron VT 819  
Deuteron XG

Deuteron VT 855  
Deuteron VT 856

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