



# DEUTERON SO 500, SO 510

Soft-touch and Matting Additive for Solvent Based Systems

**Deuteron**<sup>®</sup>  
ADDITIVES TO YOUR SUCCESS

## Product Characteristic

Deuteron	SO 500	SO 510
Solvent carrier	butyl acetate	ethyl acetate
Active content	30 %	30 %
Density	approx. 0.93 g/cm <sup>3</sup>	approx. 0.92 g/cm <sup>3</sup>
Viscosity	approx. 2500 mPa*s	approx. 1000 mPa*s
Particle size dv50	approx. 7 µm	approx. 7 µm
Particle size dv90	approx. 15 µm	approx. 15 µm
OH-value	2.1 % (calculated on the solid content)	
Appearance	slightly yellow suspension	



## Product Description

Deuteron SO 500 and Deuteron SO 510 are liquid preparations of fine elastomer particles in a solvent carrier. The used elastomer particles impart a rubber-like feel to any coating film.

Depending on the addition level it is possible to achieve pleasant soft touch effects even in extreme hard and brittle systems without compromising the film toughness. The use of Deuteron SO 500 / SO 510 and its unique soft-feel approach eliminates the need for special soft and elastic resins as it works with almost any given system. This opens up a wide range of formulation freedom to design soft-touch systems with outstanding durability.

Deuteron SO 500 and Deuteron SO 510 are easy to use liquids that are suitable for the use in auto dosage units. They are manufactured without any additives such as dispersants.

## Applications

Deuteron SO 500 / SO 510 can be used in all solvent-based coating and ink systems. The matting and soft-touch effects are largely independent of the applied film thickness and it is possible to combine Deuteron SO products with common surface additives such as waxes or other matting agents to impart soft-touch with minimal impact on the overall system performance. Because of the hydroxyl content of the elastomer particles it is possible to crosslink the particles using isocyanates. This ensures a good particle embedding and leads to significantly improved mechanical stability but slightly reduced soft-touch.

The use of Deuteron SO 500 / SO 510 especially improves performance in:

- › Soft-touch effects independent on the used binders
- › Matting
- › Good recoatability
- › Excellent mechanical and chemical resistance
- › Temperature stable up to 160 °C
- › Anti-Blocking
- › Insoluble in common solvents
- › Flexibilization

## Dosage

10 - 20 % (calculated on the complete formulation) depending on binder, application and required properties. The optimum dosage depends on the binder system and the desired surface character. It must be determined by own tests for the respective system.

Higher addition levels lead to stronger effects and increased flexibility. As Deuteron SO 500 / SO 510 are highly compatible, even very high dosages up to 70 % can be used to generate extreme effects. For cross-linking with isocyanates, a significantly over-stoichiometric dosage is recommended.



Technical Data Sheet

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## ■ Processing

Deuteron SO 500 / SO 510 is easy to disperse and can be incorporated using a common high-speed stirrer. It is possible to add Deuteron SO 500 / SO 510 at any stage of the production process, even post addition to adjust properties at a customer line is possible. Deuteron SO 500 / SO 510 does not stabilize foam.

## ■ Storage Conditions

12 months in original sealed containers at room temperature and dry conditions. Storage temperature should not exceed 35 °C. Deuteron SO 500 / SO 510 can show some phase separation after storage. Thus, it is highly recommended to stir the material before use.

## ■ Package Sizes

Steel Drum (25 kg net)  
Steel Drum (180 kg net)

## ■ Safety

According to Regulation (EC) No. 1272/2008  
Deuteron SO 500 / SO 510 are classified as dangerous products and therefore 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.



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