Technical Data Sheet

DEUTERON ST 50, ST 100, ST 125, ST 250, ST 500

Thermoplastic Texturing Agents

Deuteron®
ADDITIVES TO YOUR SUCCESS

Product Characteristic

Deuteron	ST 50	ST 100	ST 125	ST 250	ST 500
Material	HDPE	HDPE	Polyamid	Polyester	Polyester
Particle size dv50	approx. 60 µm	approx. 150 µm	approx. 170 µm	approx. 320 µm	approx. 640 µm
Particle size dv90	approx. 100 µm	approx. 220 µm	approx. 260 µm	approx. 460 µm	approx. 1000 µm
Density	approx. 0.96 g/cm³	approx. 0.96 g/cm³	approx. 1.22 g/cm³	approx. 1.28 g/cm³	approx. 1.28 g/cm³
Melting range	126-130 °C	126-130 °C	150-160 °C	150-160 °C	150-160 °C
Appearance	coarse white powder				

Product Description

Our thermoplastic Deuteron ST texturing agents are coarse plastic powders for the generation of distinct surface structures. They can be used as texture- and structuring agents for functional, haptic and decorative effects.

The final effect of the surface-texture depends on the applied layer thickness and the ratio of texturing agent to binder. Depending on the dosage, effects ranging from a rough, fragmentary structure with little influence on the gloss to closed particle layers with matt surfaces are possible.

Depending on the composition of the coating formulation, the structuring agents may tend to separation during storage. Thus, use of anti-settling agents may be necessary. The temperature resistance depends on the exposure time. Corresponding tests for exact determination are necessary if permanent temperatures of more than 130 °C or 150 °C are to be expected.

Deuteron ST- texturing agents are resistant to the most common organic solvents but testing in the individual system is recommended.

Applications

Due to the different available particle size distributions sizes, exact adjustments of the final appearance and roughness is easily possible. The texture agents of the Deuteron ST series are suitable for applications in all kinds of coatings and inks. Furthermore, it is possible to combine Deuteron ST additives with any other surface additives such as matting agents or waxes.

The products are suitable for solvent based, solvent free and water-based systems.

The use of Deuteron ST products especially improves performance in:

- no influence on viscosity
- high mechanical and chemical resistance
- rough surfaces
- improved blocking resistance

Dosage

1-15 % (calculated on the complete formulation) depending on binder, application and required properties. The quantity used depends on the desired effect. The optimum dosage is to be determined by own tests. It depends strongly on the ratio of the binder solids to the dosage of the texture agents and layer thicknesses of the application.

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Processing

The thermoplastic Deuteron ST products are easy to use and typically do not require high shear forces or wetting agents. The products are shear stable but grinding should be avoided.

Storage Conditions

24 months at room temperature and dry conditions. Storage temperature should not exceed 35 °C.

Package Sizes

Paper bags (20 kg net)

Safety

According to Regulation (EC) No. 1272/2008 Deuteron ST-products are not classified as a dangerous products 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.

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