

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

Coarse texturing agents for coating systems

## / Chemical description

Thermoplastics

## / Physical data

Deuteron	ST50	ST100	ST125	ST250	ST500	
Material	HDPE	HDPE	Polyamide	Polyester	Polyester	
Bulk density approx.	460	400	640	700	660	g/l
Specific weight approx.	0,96	0,96	1,22	1,28	1,28	
Melting range approx.	126-130	126-130	150-160	150-160	150-160	°C
Particle size d50 approx.	60	150	170	320	640	µm
Particle size d90 approx.	100	220	260	460	1000	µm
Appearance	White coarse powders					



## / Properties

Deuteron ST50 through ST500 are coarse powders for producing significant surface texturing. The nature and degree of texturing depends on the applied film thickness and the ratio of texturing agent to binder.

This allows the haptical, optical and functional properties of a surface to be tailored to specific applications.

Depending on the formulation the thermoplastic ST texturing agents may tend to sediment during storage of the coating. In such cases employing an anti-settling agent is necessary.

The thermal stability is influenced by the duration of exposure. Experiments must be undertaken to precisely determine the thermal stability if long-term exposure to temperatures of more than 130 °C to 150 °C are expected.

Deuteron ST texturing agents are resistant to most customary solvents, but this should be checked when testing the overall coating formulation.

## / Application

Deuteron ST50 through ST500 can be used in both solvent-based and solvent-free coatings, and also in water-based coating systems. The areas of application include decorative coatings and anti-slip coatings.

## / Dosage

The amount added to coatings depends on the desired surface texture. The coating thickness and method of application also play an important role. It is virtually impossible to quote a recommended dose because of the multitude of effects and structures that can be created.

As a rough initial guide, 2 - 15 % (based on the total formulation) should be used.

The optimum amount required to realise a desired effect must always be determined by your own trials.

## / Processing

Deuteron ST texturing agents can be mixed into the coating using a speed-stirrer or dissolver. The additional use of wetting agents is not required, even when the product is used in water-based systems.

The thermoplastic texturing agents are stable to shear forces, but dispersion processes that induce a grinding effect must be avoided. In systems containing pigments, texturing agents must therefore be added after grinding the pigment.

## / Storage conditions

Deuteron ST texturing agents can be stored for at least 24 months at room temperature under dry conditions.

### **/ Packaging size**

Plastic bags (20 kg net)

### **/ Safety Regulations**

According to Regulation (EC) No. 1272/2008  
Deuteron ST texturing agents are not classified as  
a dangerous product and therefore do not need to  
be labeled.

Due to the powdery nature of the product,  
measures for dust protection must be heeded  
and the build up of electrostatic charge must be  
avoided.

### **/ Structuring and Texturing Agents form our portfolio**

Deuteron ST-L, ST, ST-S, ST-G, ST-M

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