

DEUTERON ST-L, ST, ST-S, ST-G, ST-M

Duroplastic texturing agents for coating systems

/ Chemical Characteristic

Crosslinked methyl urea resin

/ Physical Data

Deuteron	ST-L	ST	ST-S	ST-G	ST-M	
Bulk density approx.	500	500	500	500	500	g/l
Specific weight approx.	1,4	1,4	1,4	1,4	1,4	
Particle size d50 approx.	45	35	32	22	11	µm
Particle size d90 approx.	72	53	46	34	19	µm
Appearance	Fine white powder					



/ Properties

Deuteron ST texturing agents are powders. They give coatings a surface texture. The nature and degree of texturing depends on the applied film thickness and the ratio of texturing agent to binder.

The texturing agents have different particle size distributions. The coarser grade induces more intense texturing with good maintenance of gloss. The finer grade gives finer texturing. Depending on the specific formulation this can lead to a reduction in the degree of gloss. The coarser fractions are responsible for the texturing, whilst the finer particles can lead to matting.

Depending on the duration of exposure to heat, the texturing agents are thermally stable to well over 200 °C. The products do not melt which distinguishes them from wax and amide-based products. The texturing agents are resistant to most customary solvents.

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

/ Application

Deuteron ST texturing agents can be used in both solvent-based and water-based coating systems. Potential applications include coil-coating systems and coatings for plastic surfaces. Deuteron ST-x can be used to customize the haptical and optical surface properties. They can also be used as a functional additive to reduce the coefficient of sliding friction.

/ Dosage

The amount added to coatings depends on the desired surface texture. This in turn depends on the thickness of the applied coating. Even the addition of 1 % results in textured surfaces. If desired, 15 % or more can be used, due to the low binder requirement. The optimum amount required to realize the desired effect must always be determined by own trials.

/ Processing

The 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 used in water-based systems. Deuteron ST-x is 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

/ Package Sizes

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 does not need
to be labeled.

Due to the fine fractions of the texturing agents,
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

Deuteron ST125

Deuteron ST250

Deuteron ST500

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