

DEUTERON SF 505, SF 707

Thermosetting additives for surface modification

/ Chemical Description

Polymethylurea resin powder

/ Physical Data

Deuteron	SF 505	SF 707
Bulk density approx.	450	430 g/l
Specific weight approx.	1.4	1.4 μm
Particle size d50 approx.	7.0	4.0 μm
Particle size d90 approx.	13.0	8.0 μm
Particle size d99 approx.	18.0	12.0 μm
Appearance	Fine, white powder	



/ Properties

Deuteron SF 707 and SF 505 increase the smoothness and add a pleasant grip to the surface. The addition of Deuteron SF 707 and SF 505 lead to a significant reduction of the coefficient of friction and highly increased scratch and abrasion resistance. They contain neither waxes nor silicones. The matting efficiency is low in order for the surface to be adjusted without heavily influencing the gloss level. Due to the two available particle sizes distributions is easy adjustment to different layer thickness possible.

In aqueous systems, whose binder shows a low electrolyte tolerance, incompatibilities and hence viscosity problems or gelation can appear. This should be considered when choosing the binder. Deuteron SF 707 and SF 505 can be mixed with all PMU powders, SiO_2 powders waxes and other fillers in every ratio.

/ Application

Deuteron SF 707 and SF 505 are applicable in systems where smoothness and pleasant haptic is desired in small dosages. Depending on the complete system Deuteron SF 707 and SF 505 can also be used to improve the mechanical resistance.

The products are particularly suitable for applications in which waxes are undesired or cannot be used. They are particularly useful as an alternative to PTFE products.

/ Dosage

The required dosage depends on the desired surface effect. For initial trials we recommend a dosage of 0.5 - 4.0 %. The matting effect can be achieved by ordinary (preferably organic) matting agents. The optimal dosage for the desired effects within the individual formulations have to be determined by own trials.

/ Processing

Deuteron SF 707 and SF 505 can be incorporated into the lacquer by stirrer or dissolver. The utilization of surfactants is not necessary, even in aqueous systems. Deuteron SF products are relatively resistant against shear forces.

/ Storage conditions

Deuteron SF products can be stored for at least 24 months at room temperature and dry conditions.

/ Package sizes

Paper bag (25 kg netto)

/ Safety Regulations

According to Regulation (EC) No. 1272/2008 Deuteron SF products are not classified as a dangerous product and therefore do not need to be labeled. Due to the fine fractions of the Deuteron SF products, measures for the dust protection must be taken and electrostatic charge shall be avoided.

/ Surface Additives from our Portfolio

Deuteron OG 861, 8612, 8614	Deuteron OG 8820, 8822, 8824
Deuteron OG 863, 8612, 8634	Deuteron OG 8670, 8672, 8674
Deuteron OG 8803, 8805, 8807	Deuteron WS

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