

DELLITE[®] HPS

Dellite[®] HPS is a nanoclay deriving from a naturally occurring especially purified montmorillonite.

Dellite[®] HPS is an additive for polymer application, used to improve various physical and thermo-mechanical properties.

Applications

- Polyolefins
- Polyester
- Polystyrene
- Ethylene Vinyl Acetate
- Polyamides
- Epoxy and acrylic resins
- Rubbers and Elastomers
- (...)

Advantages of Dellite[®] HPS in Polymeric Systems

- Oxygen, CO₂ and water vapour barrier
- Thermal stability
- Stiffness
- Melt fracture reduction
- Solvent/Chemical resistance
- Weight reduction
- Fiberglas reduction
- Rheology control
- UV transmission
- Flame retardant and Antidropping
- (...)

Chemical and physical data

		DELLITE [®] HPS
Colour		Whitish
Moisture	[%]	4-8
Loss of ignition	[weight %]	4-6
Particle size (dry)	[µm]	7-9 (medium)
Particle size after dispersion	[nm]	1x500 (medium)
Specific weight	[g/cm ³]	2.2
Bulk density	[g/cm ³]	0.65
Cation exchange capacity	[Meq/100g]	128

Incorporation

• Thermoplastic Systems

According to the application the incorporation of Dellite[®] HPS into a thermoplastic system is usually carried out as follows:

- Adding up to 50% of Dellite[®] HPS in a masterbatch and diluting the master in the final compound
- Adding directly the Dellite[®] HPS to the compound.

- **Thermoset Systems**

The incorporation of Dellite[®] HPS into a thermoset system may be obtained using the following methods:

- a) Mixing the desired amount of Dellite[®] with the resin. Then the curing agent and other additives may be added.
- b) Mixing the desired amount of Dellite[®] with the curing agent. Then the resin and other additives may be added.
- c) Resin, curing agent and additives are mixed and then Dellite[®] HPS is added.

Dosage

The typical levels of use are included in the range 1-5% based on total system weight .

Storage Stability and Packing

Product does not deteriorate in a significant way in a twelve months period.

Storage is advisable in a dry sheltered place in closed bags.

Packing is 25kg net paper bags on wood pallets of 1200kg each. Different packing is possible if required.

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