

Charex® 44PSS

General Description:

Charex® organoclays are high purity, surface modified montmorillonites, suitable for use in a wide variety of plastics. In addition to traditional inner gallery cation exchange modification, Charex.44PSS uses organo-modified siloxane chemistry as edge treatment agent to reduce moisture adsorption and enhance dispersion in polymer resins.

Product Data*:

Surface Modifier	Di-methyl, di-hydrogenated tallow ammonium/Siloxane
Appearance	Off white free flowing powder
Surface Modifier Concentration	34-36 wt%
Bulk Density	250-300 kg/m ³
Particle Size (Mean)	14-18 Micron
Specific Gravity	1.7 g/cm ³
X-ray diffraction (d ₀₀₁)	22-25 Å
Product Package**	20-kg paper bag or 400-kg bulk bag

* These data are for reference use only. Certificate of Analysis will come with each commercial shipment.

Application Guideline:

Charex 44PSS is designed for use as additive in general polyolefin and polyurethane resins. Incorporation of Charex into polyolefin improves physical performance properties and flame resistance. The loading level is commonly in the range of 4-6wt% for mechanical improvement, and 1-4 wt% for flame retardation. Charex products are very effective in flame retardation when combined with traditional flame retardants. It is possible to reduce the traditional flame retardants to reduce toxicity, specific gravity and enhance processing.

Processing Guideline:

Charex 44PSS can be used in direct compounding process to incorporate into EVA based resins to make flame retarding compounds with metal hydroxides (ATH, and MDH). Conventional batch and continuous processing equipment can be used. Processing temperature should be lowered than 250°C.

For PP or PE resin systems, we recommend the use of compatibilizer and high shear continuous extrusion equipment to incorporate Charex 44PSS. Please contact Nanocor or its distributors for detailed information. Please refer to Nanocor technical datasheet P-801, and P-804 for detailed product performance and processing guideline.