

Nanomer® I.30T

General Description:

Nanomer® nanoclays are high purity, surface compatibilized montmorillonites, suitable for use in a wide variety of plastics. Nanomer I.30T uses octadecyl ammonium as surface treatment, It offers high heat stability up to 280 °C.

Product Data*:

Surface Modifier	N-Octadecylamine
Appearance	Off white free flowing powder
Surface Modifier Concentration	28-32 wt%
Bulky Density	250-300 kg/m ³
Particle Size (Mean)	15-20 Micron
Specific Gravity	1.9 g/cm ³
X-ray diffraction (d ₀₀₁)	18-22 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.

** Research quantity product is available form Sigma-Aldrich Company: <http://www.YUgh k Yghcn>

Application Guideline:

Nanomer I.30T is designed for use as additive in general polymer resins, including polyamide and other polar resins. Incorporation of Nanomer I.30T into polymers 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. Nanomers 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 capability.

I.30T can also be use in PA6 in situ polymerization to make PA6 nanocomposite. It is suitable for both batch and continuous processes. A pre-dispersion of I.30T in caprolactam is needed prior to the polymerization reaction.

Processing Guideline:

Nanomer I.30T can be used in direct compounding process to incorporate into polyamide, polyurethane and nitrile rubber without use of any compatibilizers. Conventional batch and continuous processing equipment can be used. Processing temperature should be lowered than 280°C.

Nanomer I.30T can be fed from volumetric or gravimetric feeders.