Nanomer® I.34TCN

General Description:

Nanomer® nanoclays are high purity, surface compatabilized montmorillonites, suitable for use in a wide variety of plastics. This Technical Datasheet describes the use of Nanomer grade I.34TCN in polar polymer resins such as polyamides, polyurethane, and nitrile rubbers.

Product Data*:

Surface Modifier	Methyl, Bis hydroxyethyl, octadecyl ammonium
Appearance	Off white free flowing powder
Surface Modifier Concentration	30-32 wt%
Bulky Density	250-300 kg/m^3
Particle Size (Mean)	14-18 Micron
Specific Gravity	1.9 g/cm^3
X-ray diffraction (d_{001})	18-22Å
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 Beijing East-West Company: http://www.east8west.cn**

Application Guideline:

Nanomer I.34TCN can be incorporated into polymer resins via melt extrusion by using twin screw extruder or comparable equipments. Incorporation of I.34TCN will enhance mechanical property of polyamides (N-605). I.34TCN can also enhance flame resistance of the filled polymers. This is caused by the char forming mechanism, reduced peak heat release rate and anti-dripping effects by the nanoclay addition. The loading level is commonly in the range of 4-6wt% for mechanical improvement, and 1-4 wt% for flame retardation. Combination Nanomer I.34TCN with traditional flame retardants will allow reduction of the regular flame retardants. The new FR formulation with nanoclay will have lower density, less toxi, easy processing and good recycling capability.

Processing Guideline:

Nanomer I.34TCN 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 270ºC.

Nanocor I.34TCN can be fed from volumetric or gravimetric feeders.

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