

## Nanomer® I.31PS

### General Description:

Nanomer® nanoclays are high purity, surface compatibilized montmorillonites, suitable for use in a wide variety of plastics. In addition to traditional inner gallery cation exchange modification, Nanomer I.31PS uses silane coupling agent as nanoclay edge treatment agent to enhance dispersion in polymer resins.

### Product Data\*:

Surface Modifier	Octadecyl ammonium/Silane
Appearance	Off white free flowing powder
Surface Modifier Concentration	28-32 wt%
Bulky Density	250-300 kg/m <sup>3</sup>
Particle Size (Mean)	14-18 Micron
Specific Gravity	1.9 g/cm <sup>3</sup>
X-ray diffraction (d <sub>001</sub> )	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 from Beijing EastWest Company: <http://www.eastwest.cn>

### Application Guideline:

Nanomer I.31PS is designed for use as additive in general polyolefin resins. Incorporation of I.31PS 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. 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.31PS can also be used in polyamides, polyurethanes and nitrile rubber compounds.

### Processing Guideline:

For application in polyolefins, please refer to Nanocor technical data sheet P801 and 804. Nanomer I.31PS 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 270°C.

Nanocor I.31PS can be fed from volumetric or gravimetric feeders.