

Nanomer® I.44P

General Description:

Nanomer® nanoclays are high purity, surface compatibilized montmorillonites, suitable for use in a wide variety of plastics. This Technical Datasheet describes patented Nanomer grades specifically designed for polyolefin applications.

Product Data*:

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|---------------------------------------|--|
| Surface Modifier | Di-methyl, di-hydrogenated tallow ammonium |
| 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) | 24-26 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 East West Company: <http://www.east8weswt.cn>

Application Guideline:

Nanomer I.44P is designed for use as additive in general polyolefin resins. Incorporation of Nanomer nanoclay 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.

Processing Guideline:

Nanomer I.44P 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 240°C.

For PP or PE resin systems, we recommend the use of compatibilizer and high shear continuous extrusion equipment to incorporate I.44P. 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.