## TDS-Technical Data Sheet

## Name of Product: Clonite 30

## 1. Character of product

This product has a unique characteristic of layered one-dimensional nanostructures, interlayer with designable reactivity, large specific surface area and diameter-thick ratio as high as 200. The structural characteristics are different from other 2 d and 3 d inorganic nano particles, which can give some excellent performance to composite material.

Existing practice results show that the polymer/Nono bentonite composites obviously improve the mechanical properties, such as tensile strength, bending strength increases by $20-50 \%$, modulus of 1 to 2 times; Double friction coefficient, wear resistance; thermal deformation temperature increases to 10 to $30^{\circ} \mathrm{C}$ thermal expansion coefficient decreases about $40 \%$ and the material moisture absorption rate by 50\%; 2-5 times higher dimensional stability; Heat release rate slowed but significantly higher flame retardancy, molten liquidity increases, molding shrinkage rate is reduced, processing performance improvement.
The proportion of composite material is similar to the single polymer, the proportion reduce 20-30\% than the conventional modified polymer inorganic filler; Pervious to light quality also have different degrees of increase.

## 2. Related Index

Table 1: typical physical properties

| Item | JLH-DK4 |
| :--- | :---: |
| Appearance | Beige white ultrafine powder |
| Moisture $\left(105^{\circ} \mathrm{C} / 2 \mathrm{~h}, \%\right) \leq$ | 3 |
| Diameter-thick ratio | 200 |
| Apparent density, $\mathrm{g} / \mathrm{cm3}$ | -0.35 |
| Particle size (the passing rate of 200Mesh $\geq$ ) | 0.25 |
| Montmorillonite | 99.9 |
| Octadecyl trimethyl ammonium chloride | $60-70 \%$ |

## PLEXCHEM TECHNOLOGIES

## 3. Storage

The goods shall be stored in the dry and ventilated place, avoid damp environment; to avoid sun exposure.

Do you have the safety data sheet for this product? Please contact you service representative for one or E-mail us at: plexchem@singnet.com.sg

