PK6U58.05 PEEK

POSS affords flow enhancement in PEEK 4000 without a reduction in molecular weight or bimodal grading.

DESCRIPTION
SO1458 is a hybrid molecule with an inorganic silsequioxane at the core, organic phenyl groups attached at the corners of the cage and three active silanol functionalities.

APPLICATIONS
SO1458 TrisilanolPhenyl POSS can be used as a processing aid in thermoplastics and thermosets while retaining and enhancing mechanical properties.

SO1458 PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White powder</td>
</tr>
<tr>
<td>Thermal Stability</td>
<td>366˚C</td>
</tr>
<tr>
<td>Solvent Solubility</td>
<td>THF, chloroform, ethanol</td>
</tr>
<tr>
<td>Solvent Insolubility</td>
<td>water, hexane</td>
</tr>
<tr>
<td>Formula Weight</td>
<td>931.34</td>
</tr>
<tr>
<td>Resin Solubility</td>
<td>aromatic and aliphatic resins, oligomers, and polymers (PP, PE, PA, PC, PET, PEEK, PPS)</td>
</tr>
</tbody>
</table>

REGULATORY STATUS
INCI, TSCA

HANDLING PRECAUTIONS
Product safety information required for safe use is not included in this document. Before handling, read product and material safety data sheets and container labels for safe use, physical health and hazard information. For material safety data information, contact Hybrid.

WANT MORE INFO ON POSS FLOW AIDS?
Learn more about POSS Flow Aids on our YouTube channel.

FEATURE 1:
The flow enhancement effect is tailorable to POSS loading.

FEATURE 2:
Low shear regions show 59% reduction. High shear regions show 7% reduction.

FEATURE 3:
There is significant improvement of impact properties. 1% POSS produces 14.1% improvement, and 3% POSS produces 37% improvement.

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