

Hybrid Plastics[®]

Superior Technology for Superior Products

Polyamide POSS[®] Flow Masterbatch

POSS[®] Flow masterbatches show tremendous success in reducing the melt viscosity of a variety of injection molded and extruded resins. Hybrid Plastics[®] now introduces such a solution for polyamide polymers.

IMPROVED PROCESSING

Polyamide POSS[®] Flow is a pellet masterbatch incorporating POSS[®] that can be used directly in your process or manufacturing stream. For injection molding applications, benefits include decreased molding pressures and increased flow for filling intricate and thin-walled parts. This leads to faster cycle times and less scrap. For extrusion applications, POSS[®] Flow dramatically decreases screw torque, allowing increased extrusion rates.

RETENTION OF MECHANICAL PROPERTIES

At loading levels of up to 10%, Polyamide POSS[®] Flow does not significantly affect mechanical properties such as modulus, yield strength, or elongation to break. At a 20% loading, there is only a minor decrease in modulus and yield strength.

AVAILABILITY

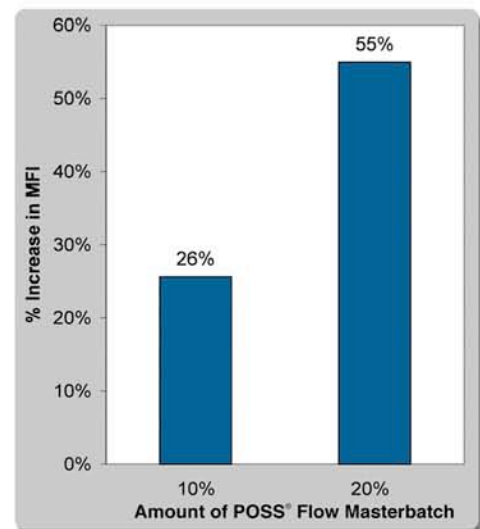
This product is offered in two different versions. Polyamide POSS[®] Flow is for use in systems without particles or fillers. Polyamide POSS[®] Flow with POSS[®] Dispersant combines two POSS[®] technologies into one product. POSS[®] Flow decreases melt viscosity, while POSS[®] Dispersant coats and disperses particles reducing melt viscosity even further, thereby increasing productivity and allowing up to three times as much filler to be added.

PHYSICAL PROPERTIES

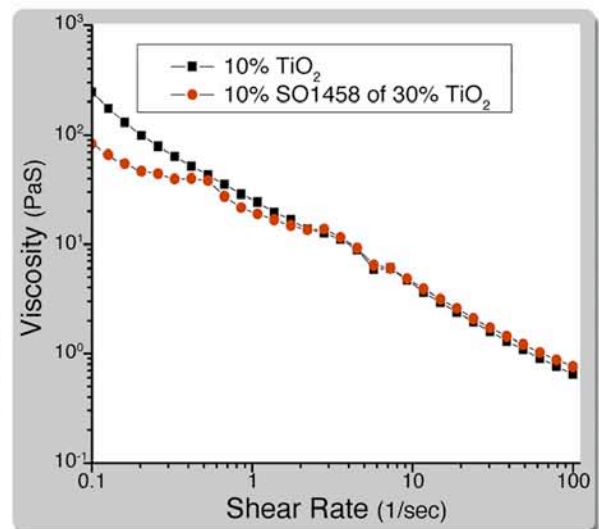
Product name/number: Polyamide POSS[®] Flow - PA6U50.01
Color: Translucent, light brown
Density: 1.02 g/cm³
Melt flow index: approx. 110 g/10 min
(180 °C / 2.16 kg)
Usage level: 10 to 20 wt-%
Thermal Stability: 350 °C
(5 wt-% loss in N₂)
Melting Point: 170 °C

WARRANTY

The information contained herein is believed to be accurate and reliable. However, the user is responsible for determining the suitability and use of the final formulations/products. Hybrid Plastics[®] warrants that its products will meet specifications, but not merchantability or fitness for use.



POSS[®] Flow - Improving Melt Flow Index



POSS[®] Dispersant - Increasing Filler Loading