Data sheet Issue 03/2024

SCONA TPPE 1003 GALL

Compatibilizer for blends of polyethylene with polar polymers to improve mechanical and optical properties. Coupling agent for filler and fiber-reinforced polyethylene composites to ensure superior adhesion to the matrix.

Product data

Composition

Chemically modified linear low density polyethylene

Typical properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Grafting functionality: maleic anyhdride

Grafting level: 1.1% MFR (190 °C, 2.16 kg): 11 g/10 min Drying loss (180 min, 110 °C): < 0.5 % Color: off-white Delivery form: pellet

Storage and transportation

Store in sealed containers in a cool, dry, and well-ventilated location

Applications

Thermoplastics

Special features and benefits

SCONA TPPE 1003 GALL is a high-performance polymeric modifier based on polyethylene (LLDPE) functionalized with maleic anhydride. The additive is an excellent compatibilizer for blends of polyethylene and polar polymers such as polyamides and ethylene vinyl alcohol, and improves the dispersion of the polar polymer. This results in better mechanical and optical properties of the compatibilized material. SCONA TPPE 1003 GALL also acts as an excellent coupling agent for polyethylene wood and glass fiber compounds, as well as a dispersing aid for polyethylene/filler composites (e.g. aluminium trihydroxide). In addition, it improves the mechanical properties in highly filled polyethylene compounds.

Recommended use

Compatibilizer	
Coupling agent	
Dispersing aid	

especially recommended recommended

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Recommended levels

Compatibilizer: 5–30 % additive (as supplied) based upon the polyethylene content in polymeric blends.

Coupling agent: 2-4% additive (as supplied) based upon the total formulation, depending on

fiber/filler content.

Dispersing aid: 2-4% additive (as supplied) based upon the total formulation, depending on

fiber/filler content.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

Extensive wetting of the fibers/fillers is required for effective compounding. For this reason, it is recommended to add the additive to the main feed of the extruder.









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This issue replaces all previous versions.