

Technical Information

TEGOPREN® 6879-50

TEGOPREN® 6879-50 is a 50 % emulsion of the organo-modified siloxane TEGOPREN® 6879 to be used for surface treatment of fillers, pigments and flame retardants making them easier dispersible in thermoplastic formulations.

Physical properties

Type of emulsion	O/W
Active content	50 %
Viscosity 25° C	< 100 mPas
Appearance/colour at room temperature	White liquid

Application

TEGOPREN® 6879-50 is a liquid dispersing additive used for surface treatment to improve dispersion properties of:

- flame retardants, e. g. MDH or ATH
- inorganic fillers e. g. titanium dioxide, talc
- organic pigments, e. g. phthalo blues or DPPs
- inorganic pigments e. g. ultramarine blue, iron oxides

in polyolefines and engineering resins.

Benefits

By hydrophobizing the pigment/filler/flame retardant surface TEGOPREN® 6879-50 offers several advantages:

- up to 50 % lower water uptake, e. g. for flame retardants such as MDH
- higher CTI values in E&E applications are achieved what is especially relevant for flame retardant compounds, e. g. MDH or MC for PA
- applicable for organic flame retardants like MP, APP and MC resulting in no whitening in the water pelletizing bath used for polyolefine, PA or PBT
- especially for TiO₂ applications with high durability and long term resistance such as in PVC window profiles
- higher colour strength for pigments
- higher filling grades for fillers and pigments
- excellent rheological properties result in better redilution of masterbatches
- improved mechanical properties
- better dispersability of pigments/fillers resulting in less speck formation and/or a higher degree of filling

Handling and Dosage

As TEGOPREN® 6879-50 is an emulsion stirring before use is recommended.

TEGOPREN® 6879-50 can be applied directly to the pigment slurry or to a filter cake with a screw. Furthermore, the product can be added in a spray drying operation.

The optimum dosage level depends on the nature of the treated particle and the composition of the polymeric formulation. It may vary between 0.5 % and 5.0 %.

Food Contact Status

EU-Regulation 10/2011

TEGOPREN® 6879-50 can be used as Polymer Production Aids (PPA) according to Art. 6 and Art. 19 of Reg (EC) 10/2011. According to our recent risk assessment to use as a PPA is possible up to a maximum level of 140 mg/m² food contact area of the plastic article.

140 mg/m² food contact area corresponds for example with a dosage of 14 % pigment coated with 1 % TEGOPREN® 6879-50 in a 100 g/m² film (e.g. 100 µm film with a density of 1 g/cm³).

USA: FDA 21 CFR

Based on the “no-migration”-principle TEGOPREN® 6879-50 can be used in compliance with FDA rules for Food Contact if used as pigment dispersant (acc. To Title 21 CFR 178.3725) in all polymers up to a level of 140 mg/m² food contact area.

140 mg/m² food contact area corresponds for example with a dosage of 14 % filler coated with 1 % TEGOPREN® 6879-50 in a 100 g/m² film (e.g. 100 µm film with a density of 1 g/cm³).

Registration

The ingredients of TEGOPREN® 6879-50 are listed in the following chemical inventories:

EINECS, PICCS

Based on the submitted information of our raw material suppliers we can confirm, that TEGOPREN® 6879-50 is compliant with EC Regulation 1907/2006 (REACH).

Storage

TEGOPREN® 6879-50 can be stored minimum 6 months in original sealed containers at room temperature. The product is sensitive to frost.

Packaging

200 kg plastic drums (800 kg each pallet)
1 000 kg containers

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

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