

Product Specification

TEGOPREN® 5840

Product description

TEGOPREN® 5840 is a polyether siloxane. It is a non-ionic product with 100 % active content.

Physical properties

Appearance	Liquid, colourless to pale straw
Viscosity	40 – 90 mPas
Cloud point	20 – 30 °C
Refraction index/25 °C	1.4430 – 1.4510
Flash point	> = 101 °C
Surface tension 0.1 % in water	Approx. 22 mN/m

Solubility (25 °C)

Water	Soluble
Alcohol	Soluble
Aromatics	Soluble
Aliphatic h. c.	Insoluble
Chlorinated h. c.	Soluble
Paraffin oil	Insoluble

Application

Apart from its extraordinary reduction of surface tension in aqueous solutions, the main property of TEGOPREN® 5840 is super spreading. This is the fast coverage of large hydrophobic surfaces.

TEGOPREN® 5840 is advisable in a multitude of industrial applications where negative interaction between substrates and coatings has to be overcome.

TEGOPREN® 5840 shows excellent surface wetting in adhesive applications, where the coating of difficult substrates is required. Therefore, it is recommended for the production of transfer labels and tapes or for laminating processes.

Furthermore, it is suitable for sealant applications.

Benefits/Properties

TEGOPREN® 5840 is a solvent free easy to handle liquid.

Due to its non-ionic nature it is compatible with cationic, anionic, non-ionic and amphoteric surfactants.

The use of small amounts of TEGOPREN® 5840 reduces the surface tension of water-based systems. It therefore enhances the spreading on non-polar surfaces e. g. polypropylene.

Due to the special selection of active ingredients TEGOPREN® 5840 might outperform, depending on the formulation and application, conventional wetting agents such as sulfosuccinates in foam (inhibiting) behaviour.

TEGOPREN® 5840 improves spreading and wetting properties (e. g. in metal working fluids)

Dosage

Depending on the application the recommended dosage may vary between 0.03 % and 1.0 %.

Suitable screening test should be performed with 0.1 % – 0.3 %.

For adhesive applications a standard dosage of 0.1 to 0.6 % is recommended. If the wetting agent is used to overcome defects or craters the standard dosage is 0.1 – 0.3 %. For the wetting of critical substrates or an improved penetration it is recommended to use 0.3 – 0.6 %.

Food Contact Status

FDA

TEGOPREN® 5840 complies with 21 CFR 175.105 (adhesives).

ISEGA-Certificate

Detailed information is available on request.

Registration status

TEGOPREN® 5840 is listed in the following chemical inventories:

EINECS, TSCA, DSL, NDSL, ECL, ENCS, PICCS, AICS, China

Packaging

Pallet à 300 kg (12 x 25 kg plastic cans)

Pallet à 800 kg (4 x 200 kg steel drums)

1 000 kg Containers

Storage stability

12 months in original sealed containers at room temperature.

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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Evonik Nutrition & Care GmbH
Goldschmidtstraße 100
45127 Essen, Germany
Phone Europe +49 201 173 2665
Phone Asia +86 21 61191 125
Phone Americas +1 804 727 0700
interface-performance@evonik.com
www.evonik.com/Interface-performance

