

Product Information

TEGOPREN® 5890

PRODUCT DESCRIPTION

TEGOPREN® 5890 is an organo-modified siloxane that is used as wetting agent in adhesive formulations. Furthermore it is used as antifoam during water-based polymerization processes.

Typical Properties

Property	Unit	Value
Appearance		clear liquid
Density at 25°C	g/cm ³	1.00-1.02
Viscosity at 25°C	mPa·s	160-230

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

TEGOPREN® 5890 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 TEGOPREN® 5890 destroys foam or so-called "dry foam" in the polymerization process of formulations produced with dispersing agents like cellulose or polyvinyl alcohols:

- Suspension-PVC
- Ethylene-Vinyl-Acetate-Copolymers (EVAc)
- Polyvinyl acetate (PVAc)

Product Composition

Product Composition	Unit	Value
Active Content	%	100-100

The data represents typical values (no product specification)

BENEFITS & ADVANTAGES

TEGOPREN® 5890 is a solvent free easy to handle liquid.

Due to the special selection of active ingredients TEGOPREN® 5890 might outperform, depending on the formulation and application, conventional wetting agents such as sulfosuccinates in foam (inhibiting) behavior.

TEGOPREN® 5890 might be used as antifoam in all steps for the production of dispersions like reaction, blow down and stripping.

TEGOPREN® 5890 outperforms conventional antifoams in several respects:

- TEGOPREN® 5890 is high efficient in fighting dry foam where conventional antifoams often fail
- TEGOPREN® 5890 shows an outstanding dispersibility and dilution stability
- Undesirable effects associated with other organic or silicone antifoams are reduced or even eliminated
- Besides the antifoaming performance, TEGOPREN® 5890 improves the dewatering of S-PVC after stripping

DOSAGE

Depending on the application the recommended dosage of TEGOPREN® 5890 may vary between 0.01% 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. For the wetting of critical substrates or an improved penetration it is recommended to use 0.3-0.6%.

For the determination of the most efficient application rate in the polymerization process we recommend an initial dosage between 0.01% to 0.1%.

HANDLING & PROCESSING

When used as antifoam during the polymerization TEGOPREN® 5890 should be used from a predilution with water

which results in a very cost effective application of the anti-foam.

The dilution may be prepared by adding TEGOPREN® 5890 to the desired amount of water.

The recommended concentration of said dilutions is in the range of 1% to 5% TEGOPREN® 5890 in water.

PACKAGING

200 kg PE drum (800 kg each pallet)

SHELF LIFE

TEGOPREN® 5890 is stable in closed containers for a minimum of 12 months.

The shelf life period can be subject to prolongations based on reapprovals in accordance with the established Evonik ISO 9001 quality management process.

HAZARDOUS SUBSTANCE

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.

REGISTRATION LISTING SUMMARY

The relevant components of TEGOPREN® 5890 are listed/ registered or exempt in the following chemical inventories.

Registration Listings

Registry	Status
Australia (AICIS)	Yes
Canada (DSL)	Yes
China (IECSC)	Yes
EU (REACH)	Yes
European Union (EINECS/ELINCS)	Yes
Japan (ENCS)	Yes
Korea (KECL)	Yes
New Zealand (NZIoC)	Yes
Philippines (PICCS)	Yes
United States of America (TSCA)	Yes

FOOD CONTACT COMPLIANCE

BfR Recommendations

TEGOPREN® 5890 can be used in compliance with the XIVth Recommendation (Plastics Dispersions) of the BfR. Polymer dispersions that comply with the XIVth Recommendation may be used in compliance with the Recommendation XXXVI (Paper and board for food contact-B.I.10 Sizing agents).

European Regulation 10/2011 and amendments

All ingredients of TEGOPREN® 5890 are covered by the European Regulation 10/2011. Detailed information is available on request.

FDA Regulations

TEGOPREN® 5890 complies with 21 CFR 176.210 (Defoaming agents used in the manufacture of paper and paperboard) and 21 CFR 175.105 (Adhesives).

Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

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