Technical Information

TEGO® Antifoam 4-94

TEGO® Antifoam 4-94 is an APEO-free antifoam emulsion based on organo-modified siloxanes.

Physical properties	
Appearance	white emulsion
Active content	40 %
Density (25 °C)	approx. 1.0 g/cm³
Viscosity, dynamic (25 °C) DIN 53019	200 – 500 mPas
pH (25 °C)	6 - 9 delivered form

Application

TEGO® Antifoam 4-94 provides reliable foam control and excellent long-term efficiency especially in pressure sensitive adhesives based on acrylates. It may also be used in aqueous media, as well as the processing and application of polymer dispersions, emulsions and a multitude of other industrial applications (e. g. industrial and household cleaners) where the use of traditional silicone oil based antifoams is restricted for certain reasons. TEGO® Antifoam 4-94 is also recommended for PU dispersions.

Benefits

The special raw material which comprises TEGO® Antifoam 4–94 gets a unique product profile that combines excellent efficiency with maximum compatibility at the same time. These properties cannot be achieved with organic or with traditional silicone oil based antifoams.

Furthermore, undesirable effects associated with silicone based antifoams (silicone spotting, fish eyes) can be eliminated in most applications.

The TEGO® Antifoam product range exceeds customer requirements according to:

- foam formation during compounding of a final formulation
- foam formation during the application of the adhesive
- inadequate storage stability

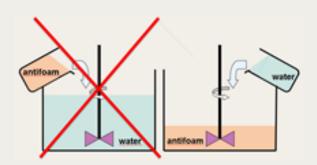
Dosage

TEGO® Antifoam 4-94 is typically used as an aqueous pre-dilution in a ratio of 1 : 1 to 1 : 10.

Depending on the application in question the required dosage may vary over a wide range (0.05 to 0.2 %). Suitable screening tests are therefore recommended (initial dosage: 0.05 %).

Handling

Dilution of TEGO® Antifoam 4-94 may proceed by adding the desired amount of <u>water to</u> TEGO® Antifoam 4-94 while stirring gently at low shear rates.



The pre-dilution will shorten the storage stability. 1:1 dilutions prepared as described above are stable for several days. 1:10 dilutions should be processed within several hours.

The product has to be stirred before use.

Food contact ctatus

FDA Regulation

TEGO® Antifoam 4–94 may be used as a defoaming agent in adhesives, paper and paperboard and as a component in polymeric coatings, and is in compliance with

- 21 CFR 175.105 (Adhesives),
- 21 CFR 175.125 (Pressure-sensitive adhesives),
- 21 CFR 175.300 (Polymeric coatings),
- 21 CFR 176.170 (Components of paper and paperboard in contact with aqueous and fatty foods).
- 21 CFR 176.180 (Components of paper and paperboard in contact with dry food),
- 21 CFR 176.200 (Defoaming agents used in coatings) and
- 21 CFR 176.210 (Defoaming agents used in the manufacture of paper and paper-board).

The maximum concentration for all uses is 0.1 %, with a maximum film thickness (where applicable) of 200 microns.

European Regulation 10/2011 and amendments

TEGO® Antifoam 4-94 can be used in accordance with Regulation 10/2011/EU.

Recommendations of the BfR

TEGO® Antifoam 4-94 complies with the XIVth BfR Recommendation.

Polymer Dispersions that comply with the XIVth Recommendation may be further used as production auxiliary according to the BfR Recommendation XXXVI under B. I. 10.

Registration status

The components of TEGO® Antifoam 4-94 are listed in the following chemical inventories:

EINECS, TSCA, ENCS, AICS, PICCS, IECSC, DSL, ECL, TCSI and NZIOC

Based on the submitted information of our raw material suppliers we can confirm, that TEGO® Antifoam 4-94 is compliant with EC Regulation 1907/2006 (REACh).

Storage stability

TEGO® Antifoam 4-94 is stable in closed containers for a minimum of 6 months.

TEGO® Antifoam 4-94 must be stored in frost-free conditions.

Packaging

210 kg plastic drums (840 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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