

## Product Information

## TEGO® Antifoam 4-94

## PRODUCT DESCRIPTION

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

## Typical Properties

Property	Unit	Value
Appearance		white emulsion
Density at 25°C	g/cm <sup>3</sup>	1.00
pH Value delivered form, at 25°C		6.0-9.0
Viscosity at 25°C	mPa·s	200-500

The data represents typical values (no product specification)

## TYPICAL APPLICATIONS

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. Highly effective, general purpose antifoam for the washing process in plastic recycling.

## Product Composition

Product Composition	Unit	Value
Active Content	wt%	38-42

The data represents typical values (no product specification)

## BENEFITS &amp; ADVANTAGES

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

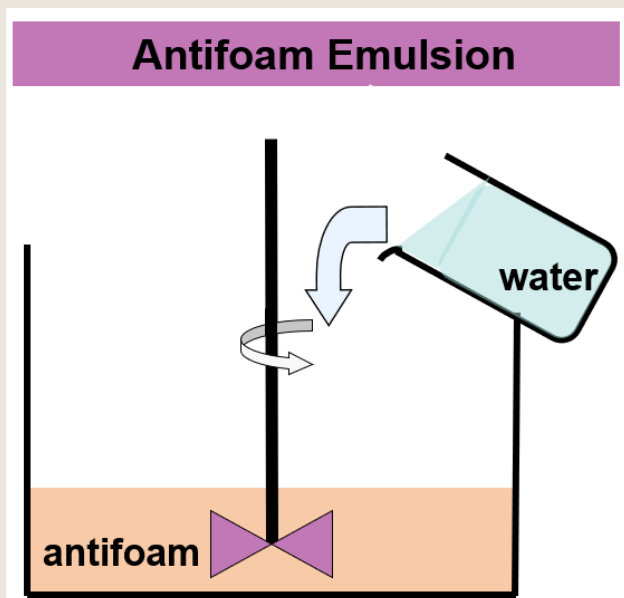
TEGO Antifoam 4-94 is free of silicone oil (PDMS).

We do not use unmodified polydimethylsiloxane (PDMS) as a raw material during the production of the organo-modified siloxane that is part of TEGO® Antifoam 4-94. Based on an analytical method that includes isolation of unmodified PDMS by preparative chromatography and quantification of the isolated fraction, followed by NMR spectroscopic analysis of the isolated fraction, it can be stated that the defoamer TEGO® Antifoam 4-94 does not contain unmodified polydimethylsiloxane (PDMS) above the threshold of the analytical detection (detection limit of the applied method is 0.1 m%).

## HANDLING &amp; PROCESSING

TEGO® Antifoam 4-94 is typically used as an aqueous predilution 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 water to TEGO® Antifoam 4-94 while stirring gently at low shear rates. The predilution 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.



## PACKAGING

210 kg drums

1 000 kg containers

## STORAGE

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

## SHELF LIFE

TEGO® Antifoam 4-94 is stable in closed containers for a minimum of 6 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 TEGO® Antifoam 4-94 are listed/registered or exempt in the following chemical inventories.

### Registration Listings

Registry	Status
Australia (AIIC)	Yes
Canada (DSL)	Yes
China (IECSC)	Yes
EU (REACH)	Yes
EU (EINECS/ELINCS)	Yes
Japan (ENCS)	Yes
South Korea (KECL)	Yes
New Zealand (NZIoC)	Yes
Philippines (PICCS)	Yes
Taiwan (TCSI)	Yes
USA (TSCA)	Yes

## FOOD CONTACT COMPLIANCE

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 paperboard). 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. BfR Recommendation

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.

#### **Disclaimer**

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