

Technical Information

TEGO® Antifoam KE 600 EC

TEGO® Antifoam KE 600 EC is an APEO-free organic antifoam emulsion based on polyethers, containing small amounts of organo-modified siloxanes for enhancing the efficiency; dilutions show excellent stability.

Physical properties

Appearance	white emulsion
Active content	60 %
Density (25 °C)	approx. 1.0 g/cm ³
Viscosity, dynamic (25 °C)	approx. 200 mPas
pH (25 °C) 1:10 dilution in water	7 – 9

Application fields

TEGO® Antifoam KE 600 EC destroys foam or prevents foam formation reliably in aqueous media and may therefore be used in a variety of industrial applications:

- in emulsion, suspension and micro suspension polymerization of PVC throughout all process steps, especially for S-PVC production*
- in the production of paper and paperboard
- in process and waste water applications
- in a multitude of other industrial applications especially if high pH stability is requested

*Special information on this application is available on request.

Benefits

TEGO® Antifoam KE 600 EC outperforms conventional organic antifoams in many respects, in particular regarding dispersibility and dilution stability. Furthermore undesirable effects associated with other organic or silicone antifoams (e. g. fogging of PVC, surface defects of coated and uncoated paper) can be very much reduced or even eliminated.

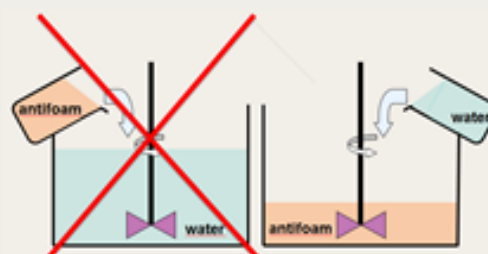
Dosage

Though TEGO® Antifoam KE 600 EC may be applied as delivered the outstanding dilution stability makes this antifoam suitable for application from low concentrated dilutions (1 : 3 to 1 : 20). This results in a very cost effective application of the antifoam.

Depending on the application in question the required dosage may vary over a wide range (0.005 to 0.2 %); suitable screening tests are therefore recommended (initial dosage: 0.1 %). 0.01 to 0.02 % TEGO® Antifoam KE 600 EC is a typical dosage for S-PVC processes using PVOH or cellulose as suspension aid.

Handling

When applying TEGO® Antifoam KE 600 EC a pre-dilution is required and can be created by adding water to TEGO® Antifoam KE 600 EC while stirring at low shear rates.



Dilutions of TEGO® Antifoam KE 600 EC that are prepared in this way are stable for 1 to 2 days.

Food contact status

European Regulation 10/2011

TEGO® Antifoam KE 600 EC has been risk assessed according to Article 19 of EU-Regulation 10/2011. Based on this risk assessment TEGO® Antifoam KE 600 EC may be used in PVC materials and articles intended to come into contact with food when used up to 200 mg/m² food contact area.

BfR Recommendation

TEGO® Antifoam KE 600 EC may be used in compliance with the XIVth BfR Recommendation.

Polymer dispersions that comply with the XIVth Recommendation may be further used as pro-reduction auxiliary according to the BfR Recommendation XXXVI under B. I. 10.

FDA regulation

TEGO® Antifoam KE 600 EC complies with 21 CFR 176.210 – (Defoaming agents used in the manufacture of paper and paperboard) and 21 CFR 175.105 (Adhesives).

PVC containing TEGO® Antifoam KE 600 EC up to maximum concentrations of 800 ppm, which is much above the typical use level of 100–200 ppm, may be safely used in compliance with 21 CFR 175.300 (resinous and polymeric coatings) and 21 CFR 177.1210 (closures with sealing gaskets for food containers).

Based on the „no-migration principle“ TEGO® Antifoam KE 600 EC can be used in Compliance with FDA's rules for food contact if used as an additive up to a maximum use level of 150 mg/sqm food contact area. The field of application includes all types of plastics, paper, coatings or adhesives. The use should be consistent with Title 21 C.F.R (Code of federal regulation), included in e.g. §175.125, §175.300, §176.170, §176.180 or 176.200.

Registration status

The components of TEGO® Antifoam KE 600 EC are listed in the following chemical inventories:

EINECS, TSCA, DSL, ENCS, AICS, ECL, PICCS, CHINA, NZIOC, TAIWAN

Based on the submitted information of our raw material suppliers we can confirm, that TEGO® Antifoam KE 600 EC is compliant with EC Regulation 1907/2006 (REACH).

Storage stability

TEGO® Antifoam KE 600 EC is stable in closed containers for a minimum of 6 months. The product has to be kept under frost-free conditions.

Packaging

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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