



TEGOSTAB® B 8123

TEGOSTAB® B 8123 is a silicone surfactant to be used as foam stabilizer in the manufacture of flexible polyether polyurethane foam. Chemically it belongs to the group of non-hydrolysable polysiloxane-polyoxyalkylene-blockcopolymers and as a stabilizer to the high active type.

Physical properties	
Viscosity (25 °C)	800 - 1 200 mPas
Density (25 °C)	1.01 ± 1.03 g/cm ³
pH-value (4 % aqueous solution)	5.0 - 8.0
Cloud point (4 % aqueous solution)	42 - 46 °C

Instructions for conditions

For TEGOSTAB® B 8123 we guarantee a shelf life of at least 12 months upon delivery, provided it is kept in originally sealed drums and protected against extreme weather conditions, particularly against heat and water.

Cold is not a general problem because TEGOSTAB® B 8123 has a solidification point below -10 °C. Nevertheless it is recommendable to bring it up to ambient temperature before the material is used.

Processing instructions

TEGOSTAB® B 8123 can be fed separately or as part of a water/amine preblend. It is soluble at all mixing ratios commonly used in the manufacture of flexible polyether polyurethane foam.

Those preblends consisting of water, TEGOSTAB® B 8123 and the usual tertiary amines have been proven to be stable for a period of at least five days at room temperature.

Application

Due to its high stabilizing potency TEGOSTAB® B 8123 offers a highly economic way to stabilize flexible polyether polyurethane foams. This is of particular advantage when the majority of the foams to be produced belong to the type which requires a high stabilizing support as it is especially the case for low densities and when the usually applied polyol is a pure PPG type with an OH number of 56.

The composition of the formulation, especially regarding the blowing agent, is not a limiting factor. TEGOSTAB® B 8123 acts in an effective and reliable way with all kinds of blowing agents as they are in current use. The processing latitude of TEGOSTAB® B 8123 is wide enough to apply this stabilizer with good results for the foam production on all types of continuously running machines. The high activity, however, suggests a particular advantage especially for low density foams made by the box foam technique.

The superior economics which are achievable with TEGOSTAB® B 8123 are caused by a dual effect: a high gas yield (as it is usual for high potent stabilizers) and - in addition - a clearly thinner bottom skin.

The following guiding formulation is thought to illustrate the economic way TEGOSTAB® B 8123 works and also to make some own development or re-formulation work easier.

100	Polyol, OH number 56
5.5	Water
0.05	TEGOAMIN® 33*
0.5	KOSMOS® 29
33.0	Methylene chloride
2.1	TEGOSTAB® B 8123
83.0	TDI 80

* The level of activating amine is chosen to be appropriate for the summer season and has to be adjusted (increased) in case of colder climates or seasons.

The given formulation is good for a density of approx. 11.3 kg/m³ and designed for box foaming what is reflected by the elevated isocyanate-index of about 134 % (i. e. 34 % in excess).

Packaging

210 kg iron drums
1 000 kg plastic containers

Information concerning

- classification and labelling according to regulations for transport of chemicals
- protective measures for storage and handling
- measures in case of accidents and fires
- toxicity and ecological effects

is given in our material safety data sheets.

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