

TEGOSTAB® B 8115

TEGOSTAB® B 8115 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. TEGOSTAB® B 8115 provides medium - high activity combined with a broad processing.

Typical physical properties

Viscosity (25 °C)	510 mPas
Density (25 °C)	1.025 g/cm ³
pH-value (4 % aqueous solution)	5.0 - 9.0

Instructions for storage

For TEGOSTAB® B 8115 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.

The solidification point of TEGOSTAB® B 8115 is below -10 °C. Storage at low temperatures, e. g. around 0 °C brings the usual slight increase in the viscosity, but has no negative impact on the homogeneity. Nevertheless, it is recommended to warm up cold material to ambient room temperature before use.

Processing instructions

TEGOSTAB® B 8115 can be fed separately or as part of a water/amine preblend. It is soluble at any mixing ratios commonly used in the manufacture of flexible polyether polyurethane foam.

Those preblends consisting of water, TEGOSTAB® B 8115 and the usual tertiary amines have been proven to be stable for a period of at least five days at room temperature.

Application

TEGOSTAB® B 8115 belongs to the group of the so called "universal silicone surfactants". This term characterizes a silicone grade originally developed for the US-market, which strengthens the flame-retardant efficiency of flame retardants in standard FR tests like the California 117 burning test, but thanks to its sufficiently large processing latitude is equally well-suited for use in customary formulations without flame retardant. For demanding FR tests like the BS 5852 (Crib V) test special FR optimized stabilizers are recommended.

The medium-high active stabilizing effect of TEGOSTAB® B 8115 permits particularly safe processing, especially when raw materials are changed frequently or in the case of strong temperature fluctuations in the raw materials. The performance in terms of activity and processing safety provides benefits for the optimization of formulations used in the production of conventional polyether slabstock foam. TEGOSTAB® B 8115 fully meets the difficult requirements of conventional foam formulations in terms of processing tolerance and open cell structure. At the same time, cost-effective levels of TEGOSTAB® B 8115 can be used to achieve the necessary stabilizing activity while still maintaining broad control of foam porosity. The use of a foam stabilizer with a broad performance characteristic provides several advantages for the slabstock foam production process. Safe process control and the production of open-cell foam are possible over a wide range of different reactivity's.

A very high degree of production flexibility can be achieved, such as:

- Use of different polyol types to optimize formulation cost or to achieve a special combination of foam properties.
- Variation of catalysis to adapt the rise time and cure time to the conditions of the plant.
- Adjustment of formulations to the special conditions of rectangular slab processes. In all cases, TEGOSTAB® B 8115 provides a safe processing.

In Planiblock processes, the use of TEGOSTAB® B 8115 provides a particularly smooth surface that is essential for the reduction of trim losses.

In slabstock foams, the distribution of the physical foam properties – particularly density and hardness – across slab cross section is of special importance. Foam stabilizers that have a broad processing characteristic like TEGOSTAB® B 8115 have shown to be effective in minimizing the variation of physical foam properties.

The composition of the formulation, e. g. if an auxiliary blowing agent is applied and what type is preferred, is not a limiting factor.

TEGOSTAB® B 8115 cooperates efficiently and reliably with all currently applied auxiliary blowing agents. A safe production is guaranteed with continuously running and box foaming machines.

Packaging

840 kg pallet (4 x 210 kg in steel 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.

Legal References

This information and all further technical advice is 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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