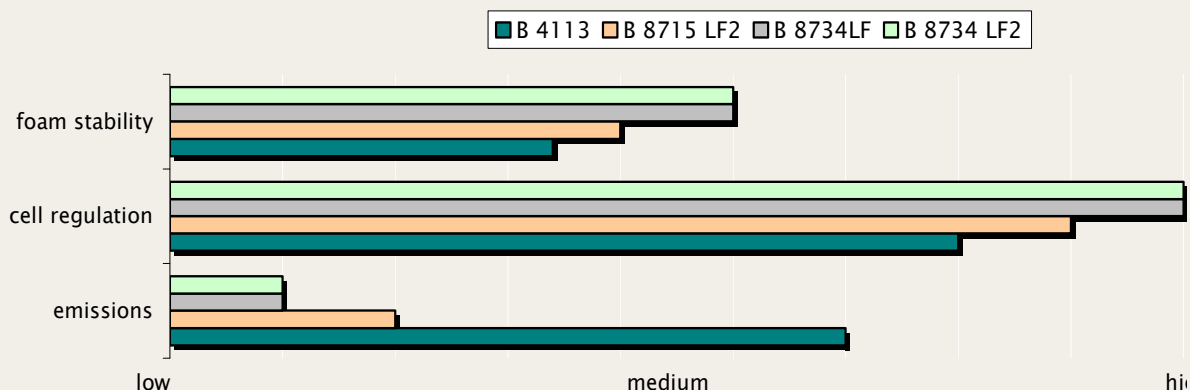


TEGOSTAB® B 8734 LF 2



Specials/Highlights

- Open, easy to crush foam
- Excellent surface/subsurface regulation
- Wide processing latitude
- Low fogging and very low emissions according to VDA 278
- Non-hydrolysable
- Phthalate free version of TEGOSTAB® 8734 LF

Application

- Typically used at 0.3 to 1.0 pphp (formulation and process conditions dependent)
- Recommended for predominantly MDI based foams
- Also suitable as a co-surfactant for TDI or TDI/MDI based foams

Processing advice

- Can be added in polyol/fully formulated system or as a separate stream
- Should be used at room temperature

Chemical description

Preparation of organo-modified polysiloxanes

Physical properties

Appearance	colourless to slightly yellow clear liquid
Density (25 °C)	0.980 g/cm ³
Viscosity (25 °C)	40 mPas
Water content	max. 0.2 %
Solubility	insoluble in water, soluble in polyols
Calculated OH number	83 mg KOH/g

Recommended storage conditions

The solidification point of TEGOSTAB® B 8734 LF 2 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.

For TEGOSTAB® B 8734 LF 2 we guarantee a shelf life of at least 12 months upon delivery under the condition, that it is stored in factory-packed containers and protected against extreme weather conditions, particularly against heat and moisture

Performance

TEGOSTAB® B 8734 LF 2 is a phthalate free version of TEGOSTAB® B 8734 LF. As such it has the excellent features of TEGOSTAB® B 8734 LF, the silicone surfactant with over many years proven record in production of high resilience (known also as cold cure) polyurethane foams at many customers worldwide.

In this product a moderate stabilising effect is combined with specially pronounced structure-regulating properties which lead to a wide processing latitude.

TEGOSTAB® B 8734 LF 2 especially regulates the critical zone of the foam structure which is close to the surface and an undesirably wide cell size distribution is safely prevented.

Thanks to this combination of features TEGO-STAB® B 8734 LF 2 is especially well suited for formulations which are based on the reaction of highly reactive polyols (EO-capped) with various MDI types or as a co-surfactant in TDI or TDI/MDI foams.

The performance of TEGOSTAB® B 8734 LF 2 is compared to that of TEGOSTAB® B 8734 LF. The results are summarized in Table 1.

Table 1: TEGOSTAB® B 8734 LF 2 versus TEGOSTAB® B 8734 LF

Component	pphp	
Base Polyol (OH = 35 mg KOH/g)	100	
Water	3.0	
TEGOAMIN® TEOA	2.0	
TEGOAMIN® 33	0.6	
TEGOAMIN® DMEA	0.2	
TEGOSTAB® B 8734 LF 2	0.6	
TEGOSTAB® B 8734 LF		0.6
TDI/pMDI (60/40)	46.2	
Mould temperature, °C	40	
Demould time, min	10	
Release agent	GORAPUR® LK 149	
Overall density, kg/m ³	46	
Surface/subsurface	OK	
Cells/cm	10	
Force-to-Crush* 1, N	1 395	1 390
Force-to-Crush 2, N	741	745
Force-to-Crush 10, N	126	125
Force-to-Crush 11, N	125	126

* 40 x 40 x 10 cm test block pressed 10 times to 50 % of its thickness using a standard 323 cm² indenter foot. Foam is then completely crushed and Force-to-Crush 11 measured.

A distinguishing feature of foams produced with TEGOSTAB® B 8734 LF 2 is a clearly improved emission characteristic in cases where stringent VOC-specifications have to be passed.

An example of reduced emissions according to VDA 278 with different stabilizers is given in table 3. All foams were made with 0.5 pphp surfactant in a given formulation (see table 2). The decrease of the volatile compounds is clearly seen going from B 4113 to B 8734 LF 2.

Table 2

Base Polyol (OH=35mg KOH/g)	100 pphp
water, total	3.5
water, extra	3.38
TEGOAMIN® DEOA 85	0.8
TEGOAMIN® 33	0.3
TEGOAMIN® BDE	0.2
N'-[3-(Dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine	0.3
TEGOSTAB®	0.5
MDI (32% NCO)	57.6 <95>

Table 3: VOC/FOG values according in VDA 278

[µg/g]	VOC		FOG	
	total	siloxane	total	siloxane
B 4113	600	131	240	0
B 8715 LF 2	490	63	210	0
B 8734 LF 2	470	23	230	0

Packaging

760 kg pallet (4 x 190 kg in steel drums)

950 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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