

Technical Data Sheet

STRUKSILON 8019

Silicone Stabiliser for Rigid Polyurethane Foam

Application Fields

STRUKSILON 8019 is a silicone stabiliser for use in various polyurethane rigid foam systems. STRUKSILON 8019 enables formulators to combine a wide production window and excellent insulation values. Due to its extraordinary compatibility to almost all blowing agent combinations and its very good flowability, STRUKSILON 8019 is very well suited for formulators running many different systems.

Chemical and Physical Properties

According to its chemical structure STRUKSILON 8019 is a polyether modified polydimethyl siloxane resistant to hydrolysis.

At room temperature STRUKSILON 8019 is a clear, colourless to yellowish liquid of medium viscosity.

General chemical structure:

R¹: H (EO); CH₃ (PO) R²: H, Alkyl, Acetoxy

n:1-50 x:1-100 y:1-20

$$\begin{array}{c} CH_{3} \\ CH_{3} \\ -Si - O \\ CH_{3} \\ CH_{3} \\ \end{array} \begin{bmatrix} CH_{3} \\ -Si - O \\ -Si - O \\ -(CH_{2})_{3} \\ | \\ (CH_{2})_{3} \\ | \\ CH_{3} \\ \end{bmatrix} \begin{bmatrix} CH_{3} \\ -Si - CH_{3} \\ | \\ CH_{3} \\ | \\ CH_{3} \\ \end{bmatrix} \begin{bmatrix} CH_{3} \\ -Si - CH_{3} \\ | \\ CH_{3} \\ | \\ CH_{3} \\ \end{bmatrix} \\ CH_{3} \\ \end{bmatrix} \\ CH_{3} \\ CH_{3} \\ \end{bmatrix} \\ CH_{3} \\ CH_{3} \\ CH_{3} \\ \end{bmatrix} \\ CH_{3} \\ CH_{3} \\ CH_{3} \\ \end{bmatrix} \\ CH_{3} \\ CH_{4} \\ CH_{4} \\ CH_{4} \\ CH$$

Typical Properties:

Viscosity at 25°C	[mPas]	app. 550
Density at 25°C	$[kg/m^3]$	app. 1055
Flash point (DIN EN ISO 2719)	[°C]	> 100
Refractive index at 25°C		1.469

The data given are typical values which are not intended for use in preparing specifications. For test methods refer to the corresponding supplement.



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Technical Properties

STRUKSILON 8019 was specifically designed as an all-round stabiliser to suite various rigid foam applications.

The wide production window and the excellent compatibility with almost all blowing agents are two of its outstanding properties. STRUKSILON 8019 can be used in 141 b, 365/227, 245 fa and pentan blown formulations. All blowing agents can be combined with water and all pentane blends can be used.

Due to the excellent lambda values and the very good flowability of the systems, STRUKSILON 8019 can be used in both continuous production, for example in sandwich panels as well as in discontinuous applications, like pipe and water heater insulation and discontinuous panel production.

The combination of these properties and the wide production window makes STRUKSILON 8019 a perfect stabiliser for formulators running a high number of different rigid foam formulations. Additionally, STRUKSILON 8019 can also help to formulate systems for cost sensitive applications.

Recommended Dosage

Usually, STRUKSILON 8019 is applied in quantities of 1.5 to 3.5 php (parts on 100 parts polyol). We recommend to adjust the optimum dosage to the corresponding system.

Product Safety and Handling

STRUKSILON 8019 is not a hazardous material for the purposes of hazardous materials regulation.

Further information regarding safety, toxicology, special properties of the product, transport and storage is given in the safety data sheet.

Packaging, Storage and Transport

Storage stability 12 months in closed original containers if transported

and stored at temperatures between 1 and 30°C.

Packaging 200 kg drums, 1000 kg containers (IBC)

The suggestions for application and usage of our products as well as possible proposed formulations are meant to advise only to the best of our knowledge. This information is without obligation and does not release customers from their own testings to ensure suitability for intended processes and use. Liability is only accepted in case of intention or gross negligence. Liability for any defects caused by minor negligence are not accepted. Each producer is responsible and liable to observe legislation and patent rights of third parties. This new leaflet replaces all previously printed documentation.

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