

POLYURETHANE ADDITIVES FOR FROTH FOAM APPLICATIONS

SURFACTANTS & CATALYSTS



EVONIK – SOLVING YOUR FROTH FOAM CHALLENGES



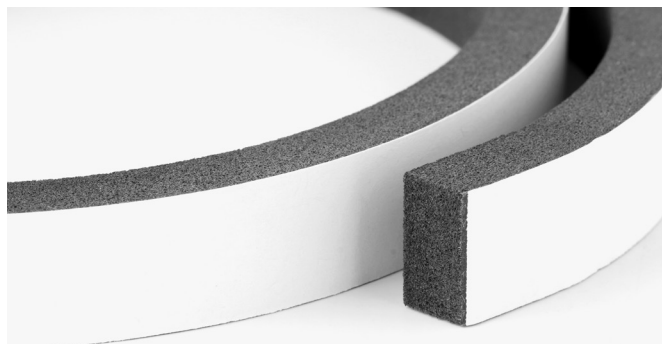
Mechanically frothed polyurethane foams are typically prepared by using shear force to disperse air into a reacting polyol-isocyanate system. Polyurethane foam frothed in this way can be applied to a substrate and then cured by heating at elevated temperatures. Formulating using Evonik surfactants, it is possible to process polyurethane foams in the density range of between 200 – 800 kg/m³ (12.5 – 50 pcf). With the addition of water in the system, foam density can be further reduced.

Polyurethane froth foams are used for a broad variety of applications such as carpet and rug backing, dampening pads for flooring underlays, artificial turf, sealants, gaskets or adhesive tapes, and electronic applications.

Our extensive product portfolio includes the innovative silicone, amine, and metal based polyurethane additives needed for success in froth foam systems. Building on our deep understanding of PU chemistry, our breakthrough technologies enhance the foam's physical properties and deliver a tailored curing profile to improve processability. With manufacturing sites and laboratories across the globe, we can meet your density requirements and increase production efficiency. Whatever your challenge, Evonik is your partner to support your everyday needs and future foam developments.

Evonik offers unique additives to polyurethane frothing technology. Our chemists have developed specially designed surfactants to help stabilize the PU system, regulate cell size and cell distribution, while also ensuring efficient frothing.

Evonik delayed action catalysts can improve the processing latitudes and stability in microcellular foams. They ensure that no reaction occurs during frothing, delivery and final lay-down. Once the system is applied, snap curing is activated under heat.



PRODUCT TYPE	PRODUCT NAME	PRODUCT DESCRIPTION
Surfactant	TEGOSTAB® B 8984	Highly potent froth surfactant that provides superior froth stability with a very fine and homogeneous cell structure. Ideally suited for low density froth foams with densities down to 200 kg/m³ (12.5 pcf). Contains VOC.
	TEGOSTAB® B 89120	Low VOC froth surfactant for low density froth foams with densities down to 200 kg/m³ (12.5 pcf). Provides superior froth stability with a very fine and homogeneous cell structure. Ideally suited for all polyurethane froth foam applications where VOC is an issue.
	TEGOSTAB® B 89177	Froth surfactant for medium and high-density froth foam applications (400 – 800 kg/m³ of 25 – 50 pcf). For example, ideally suited for frothed polyurethane coatings used for artificial turf backing. Can also be used as co-surfactant in combination with TEGOSTAB® B 8984 or TEGOSTAB® B 89120. Free of VOC.
Catalyst	POLYCAT® SA 102	Heat activated catalyst with an excellent front-end delay with thermo-activation temperature of ~60 °C (140°F). Recommended for artificial turf applications.
	POLYCAT® DBU	Strong gel catalyst that provides good curing properties in elevated temperatures for artificial turf applications.



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