

Polyurethane additives for continuous insulation panels

Our high-performance polyurethane additives can be used in a broad range of insulation panel applications to improve the wall and roof insulation properties of domestic, commercial and industrial buildings. We offer polyurethane and polyisocyanurate foam additives in continuous flex-faced and metal-faced insulation panel types, specifically designed to provide improved insulation value, better surface quality, improved adhesion and reduced smoke and flame generation. For the manufacturing of the various types of PIR and PUR insulation panels we offer **surfactants, amine catalysts, dedicated trimer catalysts, special performance additives** as well as **release agents**.



Surfactants for continuous insulation panels – PIR

Product	Description	Pentane emulsification	Cell fineness
TEGOSTAB® B 8443	Good choice for HC-blown metal-faced panel formulations (MDI compatible). Provides improved surface quality.	stable	••
TEGOSTAB® B 84501	Suitable for a wide range of flex-faced panel formulations including HFO-blown foams. Alleviates formulation challenges with HFO blowing agents.	stable	••
TEGOSTAB® B 84504	Suitable for metal-faced and highly catalyzed flex-faced panel formulations with challenging polyol-blowing agent compatibility. Reduces surface voids and improves lambda values.	fast & stable	•••
TEGOSTAB® B 84507	Good choice for metal-faced and flex-faced panel formulations with high content of iso-pentane as blowing agent. Promotes smooth and uniform surface quality.	fast	•••
TEGOSTAB® B 84508	Applicable to flex-faced panel formulations with challenging polyol-blowing agent compatibility. Prevents blowing agent surface eruptions in low compatibility formulations without compromising lambda value.	stable	••
TEGOSTAB® B 84510	Designed for HC-blown metal-faced and flex-faced panel formulations with challenging polyol-blowing agent compatibility. Prevents pentane eruptions in low compatibility formulations.	stable	••
TEGOSTAB® B 84521	Designed for highly catalyzed flex-faced and metal panel formulations with more challenging polyol-blowing agent compatibility. Provides low lambda values.	fast	•••
TEGOSTAB® B 84522	Especially suitable for highly catalyzed flex-faced and metal panel formulations with high polyol-blowing agent compatibility. Provides lowest lambda values.	fast	•••
TEGOSTAB® B 84523	Designed for highly catalyzed flex-faced and metal panel formulations with more challenging polyol-blowing agent compatibility. Provides lowest lambda values benefiting surface quality.	fast	•••



• = low* •• = medium* ••• = high* – = not applicable*

* application-specific ranking



Surfactants for continuous insulation panels – PIR

Product	Description	Pentane emulsification	Cell fineness
TEGOSTAB® B 84525	Especially suitable for highly catalyzed flex-faced and metal panel formulations with high polyol-blowing agent compatibility. Provides lowest lambda values benefiting surface quality.	fast	•••
TEGOSTAB® B 8496	Applicable to HC-blown metal-faced panel formulations. Provides energy efficiency without compromising surface quality.	stable	•••
TEGOSTAB® B 8513	Especially suitable for highly catalyzed flex-faced panel formulations with PA-based polyols. Improves energy efficiency.	fast	•••
TEGOSTAB® B 8522	Suitable for a wide range of panel formulations offering broad processing latitude.	stable	••
TEGOSTAB® B 8537	Applicable to low speed lamination with critical processing conditions. Suitable for the use of incompatible raw materials.	very stable	•
TEGOSTAB® B 8871	Good choice for highly catalyzed flex-faced panel formulations with high polyol-blowing agent compatibility. Provides low lambda values.	fast	•••

Surfactants for continuous insulation panels – PUR

Product	Description	Pentane emulsification	Cell fineness	Flammability performance
TEGOSTAB® B 8443	Good choice for HC-blown metal-faced panel formulations (MDI compatible). Provides improved surface quality.	stable	••	•
TEGOSTAB® B 84501	Suitable for a wide range of flex-faced panel formulations including HFO-blown foams. Alleviates formulation challenges with HFO blowing agents.	stable	•••	•
TEGOSTAB® B 84514	Suitable for all common blowing agents. Well-balanced stabilization and emulsification properties with excellent FR performance.	very stable	•	•••
TEGOSTAB® B 8466	Good choice for flex-faced panel formulations with challenging polyol-blowing agent compatibility. Prevents separation of pentane from incompatible materials.	very stable	•	••
TEGOSTAB® B 8490	Designed for fire rated metal-faced panel formulations. Improves FR properties without compromising lambda value.	stable	••	•••
TEGOSTAB® B 8496	Good choice for metal-faced panel formulations with all blowing agents. Provides energy efficiency without compromising surface quality.	stable	•••	•
TEGOSTAB® B 8498	Suitable for HC- & HFC-blown metal-faced panel formulations. Reduces surface voids.	stable	•••	•
TEGOSTAB® B 8522	Suitable for a wide range of flex-faced panel formulations offering broad processing latitude.	stable	••	•

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* application-specific ranking

Catalysts for continuous insulation panels – PUR & PIR

Product	Description	Blow activity	Gel activity	Trimerization activity
Amine catalysts				
POLYCAT® 5	Strong blowing amine catalyst for improved flow.	•••	•	–
POLYCAT® 8	Widely applicable gelling amine catalyst.	•	•••	–
POLYCAT® 9	Low odor gelling amine catalyst.	•	•••	–
POLYCAT® 36	Balanced amine catalyst, designed especially for low water PIR formulations.	••	••	•
POLYCAT® 41	Gelling amine catalyst with pronounced curing activity. Recommended to being used as co-catalyst.	•	••	•
Trimer & curing catalysts				
KOSMOS® 33	Standard potassium acetate-based trimerization catalyst.	•	••	•••
KOSMOS® 45 MEG	Highly concentrated potassium acetate-based trimerization catalyst.	•	••	•••
KOSMOS® K 30 MEG	Standard potassium propionate-based trimerization catalyst.	•	••	•••
KOSMOS® 70 LO	Low OH potassium octoate-based trimerization catalyst to decrease MDI use level.	•	••	•••
KOSMOS® 75 MEG	Standard, low viscosity potassium octoate-based trimerization catalyst.	•	••	•••
KOSMOS® K 65 LO	Low OH potassium neodecanoate-based trimerization catalyst to replace standard potassium octoate in applications requiring the absence of 2-EHA.	•	••	•••
DABCO® TMR 7	Highly efficient low odor trimer catalyst. Providing high PIR conversion and improved surface curing.	•	••	•••
DABCO® TMR 16	Optimized trimerization catalyst package for continuous PIR systems providing easy processing and allowing for application in formulations requiring the absence of 2-EHA.	•	••	•••
DABCO® TMR 23	Specially designed trimerization catalyst package for applications requiring the absence of 2-EHA. Provides easy processing even in high index formulations.	•	••	•••
DABCO® TMR 30	Amine-based, gel/trimerization catalyst for early initiation of the trimerization reaction.	•	••	•
DABCO® TMR 31	Co-catalyst promoting strong back-end curing and improving dimensional stability.	•	••	•

Performance additives for continuous insulation panels – PUR & PIR

Product	Description
DABCO® BA 201	Processing additive for continuous lamination. Delaying front-end activity and improving curing.

• = low* •• = medium* ••• = high* – = not applicable*

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Release agents for continuous insulation panels – PUR & PIR

Product	Description
GORAPUR® CL 124 W	Water-based dilutable concentrate, functional siloxanes for improved surface curing. Optimized for PIR/PUR formulations.
GORAPUR® CL 135 W	Water-based dilutable concentrate, siloxanes and waxes for better surface finish and release properties. Optimized for PIR/PUR formulations suitable for high dilution ratios.
GORAPUR® LK 104-9 B	Solvent-based sprayable paste wax for priming the side flights after cleaning process.

**FOR FURTHER INFORMATION PLEASE GO TO
OUR SERVICE PLATFORM EXPLORE PU**

https://explorepu.evonik.com/download_area/



Legal notice

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Advice on the performance of catalysts, release agents, surfactants and other performance additives.

The performance of catalysts, release agents and surfactants – influencing the final physical properties of a polyurethane foam by supporting the emulsification, nucleation, reaction profile and foam stabilization – highly depends on the individual formulation and foam processing conditions. Performance ratings of all catalysts, release agents and surfactants are only rough guidelines!

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