

# Micro-Emission (ME)

PUR Hotmelt Adhesives



Recent developments of PUR hotmelt adhesives: reduced monomeric diisocyanate content for better health and occupational safety



## The importance of micro-emission in connection with PUR hotmelt adhesives

A contribution to the significant improvement of occupational health and safety

PUR hotmelt adhesives contain isocyanates, which are required for the crosslinking reaction. Chemical crosslinking creates the outstanding properties of PUR hotmelt adhesives, such as excellent heat and moisture resistance.

Isocyanate exists in both polymer-bound form and, in small quantities, in monomeric form. When adhesives melt during

processing, vapors can be generated that contain monomeric diisocyanate. This can lead to respiratory sensitization. For this reason, such products must be labeled accordingly with the GHS symbol 08.



**KLEIBERIT® micro-emission PUR hotmelts contain less than 0.1% of monomeric diisocyanate. This eliminates the need for training, as well as the labelling requirement of the PUR adhesive as a hazardous material.**

By using KLEIBERIT® ME hotmelt adhesives, you not only release yourself and your employees from the training obligation, but as a company you also ensure improved health and occupational safety for your employees.



**KLEIBERIT® offers a variety of micro-emission (ME) hotmelt adhesives for a wide range of applications.**

In addition to improving health and occupational safety, the primary objective was to replace the existing PUR hotmelt adhesives with the same performance. A conversion or even an expansion of existing equipment is not necessary.

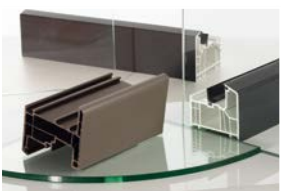
**ME Flat Lamination/Production of sandwich elements**

Product	Application examples/Characteristics
KLEIBERIT 706.1.50	The specialist for high gloss bonding. Suitable for all laminates due to wide adhesion spectrum and good initial strength. IMO certified
KLEIBERIT 706.2.50	Adhesive with medium open time and moderate initial strength, especially suitable for plastic foils of all types.
KLEIBERIT 706.4.50	Adhesive with very high initial strength, especially suitable for HPL bonding. No bubbling. IMO certified
KLEIBERIT 706.7.50	Especially suitable for bonding HPL and CPL, very good wetting behavior. Long open time, as well as good initial strength.
KLEIBERIT 709.1.50	Adhesive with very good adhesion properties to inorganic materials such as metals, mineral materials, etc.
KLEIBERIT 711.0.52	Adhesive for lamination of transparent foils. Processing possible via roller systems, as well as via slot die, short open time.
KLEIBERIT 711.1.52	Adhesive for laminating transparent foils. Specially developed for processing via slot die, can also be processed via roller, short open time.
KLEIBERIT 711.9.50	Adhesive with a very high initial strength and at the same time long open time. Characterized by a very wide adhesion spectrum
KLEIBERIT 716.4.50	Excellent for bonding thin foils and impact sound insulation, low application quantities can be realized
KLEIBERIT 716.8.50	Suitable for bonding coverings containing plasticizers (e.g. LVT). Excellent adhesion to PVC and other plastics




**ME Profile wrapping for interior and outdoor use**

Product	Application examples/Characteristics
KLEIBERIT 702.0.50	For lamination of thin foils to wood based materials
KLEIBERIT 702.5.59	For lamination of foils, veneers and laminates to wood based materials and suitable plastic and aluminum profiles. Versions of this product are available for different requirements
KLEIBERIT 702.8.59	For lamination of foils, veneers and laminates to wood-based materials and suitable plastic and aluminum profiles
KLEIBERIT 703.7.50	Adhesive with a long hot tack phase and yet steeply increasing strength build-up immediately after the joining process
KLEIBERIT 704.3.50	For lamination of all foils and PVC profiles approved according to RAL GZ 716. Particularly suitable for all applications where high initial strength is required
KLEIBERIT 708.7.50	Adhesive with very high initial strength, suitable for CPL, rigid foils and tight radii
KLEIBERIT 711.1.52	Lightfast, for lamination of thin transparent foils



## ME Edge Banding

Product	Application examples/Characteristics
KLEIBERIT 707.9.50	Can be used for all common edgeband materials, can remain in the melting tank overnight without cleaning (KLEIBERIT® Overnight Technology). Available in ivory, white, translucent and black
KLEIBERIT 707.9.85 	Micro-emission technology with > 35% non-petroleum raw materials



Adhesive series are available for all applications in the wood and furniture sectors. We also have suitable ME PUR hotmelt adhesives in our portfolio for design flooring and the production of sandwich elements.

KLEIBERIT® ME PUR hotmelt adhesives are performance-equivalent alternatives to the well-known and proven KLEIBERIT® PUR hotmelt adhesives. It is not necessary to expand or modify production facilities.

Our engineers have decades of experience in bonding a wide variety of material combinations. They are familiar with the machines and application methods on the market and are highly committed to developing tailor-made bonding processes together with our customers.

Would you like advice or do you need more detailed information on our products or training in accordance with the REACH restriction regulation? Together we will find the right solutions and products for your individual process.

Let us advise you or visit our website:

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