



Adhesive solutions

for sandwich panel
manufacture

For a long-term quality

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MITOL, as a solution provider, offers a wide range of adhesives which have been developed in line with customers' technology requirements.

MITOPUR adhesives are one or two-component polyurethane adhesives for gluing of all kind of plates on various isolating materials in multipurpose sandwich panels which are used for:

- ✓ **automotive industry - caravans, refrigerated vehicles**
- ✓ **HVAC: heating, ventilation, air conditioning**
- ✓ **building elements - entrance doors, facade elements, roofing, clean rooms, refrigeratore rooms, containers, mobile homes**
- ✓ **shipbuilding - walls, doors, ceillings**



Characteristics of MITOPUR adhesives:

- Allow gluing of all kind of plates on various isolating materials
- For high production serial gluing and low serial manual gluing
- Fast curing adhesives are available for machine mixing and spreading of adhesive
- Normal curing adhesives of various viscosity and pot life are available for manual spreading with roller or notched trowel
- Varies solutions for gluing of small and large dimensions of sandwich panels

Characteristics of gluing joint

- Water resistance
- Temperature resistance from -40°C to +120°C
- Retains its elasticity also at low temperatures
- High final strength
- Long-term quality
- Can be flame retarding

MITOL's VISION LINE adhesives fall into at least one of the following categories:

- Adhesives with at least 20% biobased raw materials
- Energy saving hot melt adhesives - the working temperature is reduced by at least 20%
- Low emission adhesives
- Adhesives which do not hinder the recyclability of the end product

One component polyurethane adhesives

Advantages of 1c MITOPUR adhesives

- Ready to use adhesives
- Good processing with spray application
- Easily manually spreading with roller or notched trowel
- Good gap filling properties due to foaming of adhesive
- Good penetration into insulating material due to low viscosity and foaming of adhesive
- Up to 30% less consumption due to foaming of adhesive

Product	Viscosity (mPas)	Open assembly time without/with water supply (min)	Minimum pressing time at 23°C (min)	Special properties
MITOPUR E9	2 500 - 5 000	15 / 7	15	Fast setting type. Excellent adhesion to various plastic surfaces. High production capacity.
MITOPUR E19	2 000 - 4 000	20 / 12	20	Machine or manual application. Cost saving type. VISION line product.
MITOPUR E19/45	2 000 - 4 000	45 / 30	45	For larger bonding surface. Cost saving type. VISION line product.
MITOPUR E20	2 500 - 4 000	20 / 12	20	Universal type of adhesive. Machine or manual application.
MITOPUR E55	2 500 - 4 000	55 / 45	100	Slow curing. Machine or manual application. For larger bonding surface.



Two component polyurethane adhesives

Advantages of 2c MITOPUR adhesives

- Solvent & odour free adhesives
- Possibility of gluing larger bonding surfaces due to long open time of adhesives
- Adjustable pot life by adding catalyst MITOPUR K95
- High production capacity due to short pressing time
- Good processing with spray application
- Easily manually spreading with roller or notched trowel
- Good gap filling properties
- Possible assembling applications on vertical and ceiling surfaces

Product	Viscosity at 23°C (mPas)	Pot life for 100g A+B (min)	Open assembly time at 23°C (min)	Minimum pressing time at 23°C (min)	Special properties
MITOPUR A1	5 000 – 8 000	100-240	200	300	Slow curing adhesive for roller spreading. Highly resistant joint. Compliant with food regulations EU 10/2011. VISION line product.
MITOPUR A1/5	5 000 – 8 000	5-7	20	30	Fast curing adhesive for application by mixing and dispensing devices. High production capacity. Compliant with food regulations EU 10/2011. VISION line product.
MITOPUR A1/15	5 000 – 8 000	13-17	50	90	Fast curing adhesive for application by mixing and dispensing devices. Compliant with food regulations EU 10/2011. VISION line product.
MITOPUR A2	8 000 – 13 000	90-150	180	300	Universal adhesive for manual and machine application. For larger bonding surfaces. VISION line product.
MITOPUR A2/15	8 000 – 13 000	11-16	35	90	Fast curing for manual and machine mixing and spreading. VISION line product.
MITOPUR A2/45	8 000 – 13 000	35-55	130	150	Medium curing for manual and machine mixing and spreading. VISION line product.
MITOPUR A3	18 000 – 28 000	90-150	190	300	Slow curing adhesive for manual application. Better contact between materials due to higher viscosity. VISION line product.
MITOPUR 402 SU	6 000 – 10 000	210-330	130	420	Slow curing and flame retarding adhesive in accordance with B.S. 476 Part 7:1971, class 1 For producing of fireproof sandwich panels.
MITOPUR B7 Hardener	100 – 400	Mixing ratio by weight A :B = 81,5:18,5			

Hot melt & dispersion adhesives

Product	Base	Viscosity (mPas)	Softening point (°C)	Application temperature (°C)	Special properties
TERMOKOL PUR 2524	PUR Hot -melt	10 000 -20 000 At 120°C	57	110 – 160	Continuous process. Low processing temperature. High initial strength. Good adhesion to various materials. Excellent water & temperature & solvents resistant joint. High final strength.
TERMOKOL 2636	SB block copolymer	≈ 7 000 At 120°C	77	110 – 160	Permanently tacky at room temperature. Firmly adhere to a variety of difficult to glue surfaces. Low processing temperature. Flexible joint. High production capacity
TERMOKOL 2336	SB block copolymer	≈ 17 000 At 160°C	107-117	160 – 180	Permanently tacky at room temperature. Firmly adhere to a variety of dissimilar surfaces. High heat resistant and flexible joint.
MEKOL 1001/M	PVAc dispersion	8 000 – 11 500 At 23°C	/	18-25	Long open time. For surface gluing of veneer, decorative laminates, EPS on wood, chip- and fibreboard or other porous materials Meets the requirements IMO Resolution A.1/3.18e (Modul B)



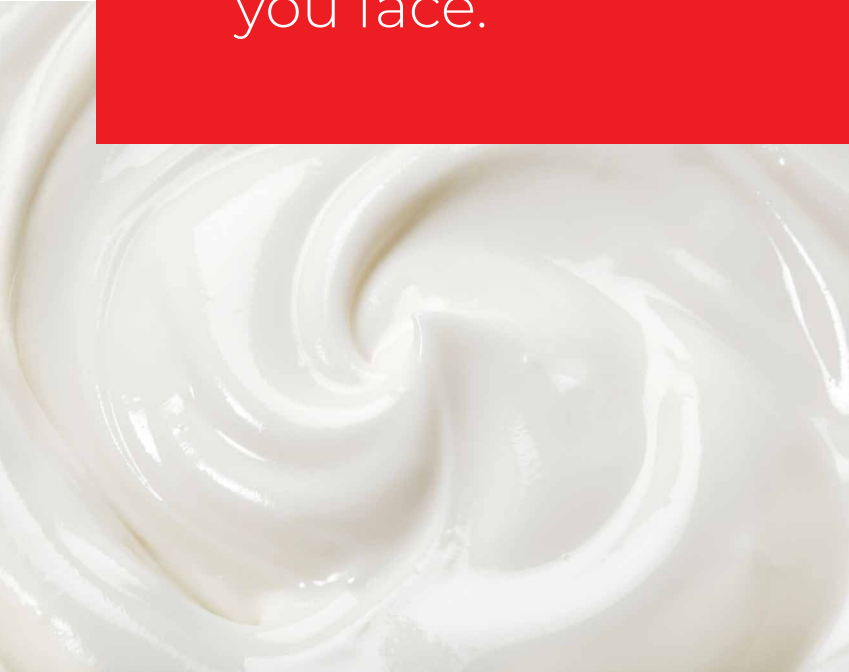
Assembling adhesives

Product	Base	Special properties
MITOMONT HP40 (transparent)	hybrid polymer	Fast bonding and sealing of almost all materials. Transparent, strong, elastic and highly resistant joint.
MITOMONT HP50 (black, grey, white)	hybrid polymer	Fast bonding and sealing of almost all materials. Strong, elastic and highly resistant joint. Compliant with ISO 846 in antimicrobial characteristics.
MITOMONT HP70 VISION (white)	hybrid polymer	Fast bonding in sealing almost all materials. Strong, elastic and highly resistant joint. Compliant with EMICODE EC1 PLUS - very low emissions and ISO 846 in antimicrobial characteristics. VISION line product.
MITOPUR E20	1c polyurethane	Medium curing adhesive for bonding of various materials. Strong and highly resistant joint.
MITOPUR E45	1c polyurethane	Slow curing adhesive for bonding of various materials. Good gap filling properties. Strong and highly resistant joint.



These products represent a limited selection of our product range. Contact our specialist for more information or technical data sheet.

Adhesive solutions for every manufacturing challenge you face.



MITOL is the leading Slovenian producer of adhesives providing innovative and effective solutions in the field of gluing for more than 70 years. With reliable, technologically advanced products and superior customer service we have managed to build close relationship with our partners in more than 35 countries around the globe. Being aware of the sustainability challenges we devote special attention to the selection of materials and production processes that reduce environmental impact.



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