



# Adhesive solutions for HVAC & AIR Filter manufacturing

For a clean working process & a healthy environment



MITOL, a producer of a wide range of adhesives and a solutions provider, offers adhesives developed in collaboration with customers to meet specific technological requirements. The key advantages of our adhesives include **quick** adaptation to production technologies, optimal flow properties, excellent adhesion on various materials, and a long-lasting, durable final product.

Our filter adhesives and moulding compounds are widely used in the production of heat exchangers and air filters to ensure clean air by effectively removing impurities.

Our adhesives are the optimal solution for various types of heat exchangers:

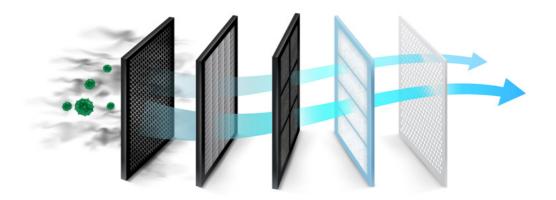






Enthalpic Counterflow Heat Exchangers Crossflow Heat Exchanger

Rotary Heat Exchangers



Our vision is to **become a key global partner in adhesive solutions for the HVAC and air filtration industries**. We are driven by continuous innovation, customer collaboration, and a commitment to sustainability.

Our Vision Line adhesives reflect the **highest standards of performance**, **tailored for cutting-edge applications** in modern manufacturing processes.





Adhesives contain at least 20% biobased materials



Adhesives do not compromise the recyclability of the end product



Energy-saving hot melt adhesives – reduce working temperatures by at least 20%



Low-emission adhesives





- · Pleat bonding and fixation
- · Protecting of stitches
- · Gluing in heat excangers



#### **Characteristics of adhesives:**

- · Good adhesion to different materials, also to difficult to bond surfaces
- Short setting times for high production capacities
- Distinguished by flexible & resistant joints
- Compliant with food regulations FDA 21 CFR 175.105
- · Compliant with ISO 846 in antimicrobics characteristics

#### **SELECTION OF HOT MELT ADHESIVES**

Product	Base	Viscosity (mPas)	Softening point (°C)	Application temperature (°C)	Special properties
TERMOKOL 2617	EVA hot melt	at 170° C: Approx. 3 500	Approx: 113	130 – 180	White opaque, medium speed gluing
TERMOKOL 2321/1	EVA hot melt	at 150°C: 1 500 - 1 900	108-115	150 – 180	Yellowish, medium open time, compliant with food regulations FDA 21 CFR 175.105 VISION line product
TERMOKOL 2412	EVA hot melt	at 150°C 1 500 – 2 500	75-90	150 - 160	Yellowish, lower application temperature, compliant with food regulations FDA 21 CFR 175.105
TERMOKOL 2090	EVA hot melt	at 170°C: Approx. 14 000 - 17 000	75-80	150 - 180	Transparent, lower application temperature, excellent adhesion to plastic and aluminium, Complaint with ISO 846 in antimicrobics characteristics
TERMOKOL 2927	Amorphous polyolefine	at 160°C: Approx. 1 600	Approx. 110	150 - 180	Yellow, good hot tack and thermal stability, excellent adhesion to plastic and aluminium, Complaint to ISO 846 in antimicrobics characteristics
TERMOKOL ULTRA 2318	Amorphous polyolefine	at 200°C: 2 000 - 3 000	120 - 127	170 - 200	White, good adhesion to difficult to bond surfaces. High temperature, water and chemical resistance
TERMOKOL ULTRA 2058	Amorphous polyolefine	at 200°C: Approx. 4 000	Approx: 125	150 - 200	Transparent good adhesion to difficult to bond surfaces. High heat resistance, water and chemical resistance
TERMOKOL PUR 2567	Polyurethane	at 140°C: Approx. 6 000	/	100 - 130	Transparent, elastic, very high green strength, short open time, excellent bond strength, very high heat and cold resistance, water, hydrolysis and solvent resistat

# MITOPUR two component polyurethane moulding compounds and adhesives for:

- · making filter end-cups
- gluing filter media into end-cups, frames, cassettes ...
- gluing O-rings

#### **Characteristics of adhesives**

- Hard adhesives
- Excellent adherence on all types of metals, paper, non- woven and plastic materials
- · Good flow characteristics
- · Fast curing adhesives for high serial production
- · Good gap filling properties
- · VISION line products with bio based ingredients

#### **Characteristics of gluing joints**

- Water resistance
- · Good resistance to various media
- Temperature resistance from -40°C to +160°C
- · Retains its elasticity also at low temperatures
- High final strength
- · Long-term quality



#### SELECTION OF TWO COMPONENT POLYURETHANE MOUDLING COMPOUNDS AND ADHESIVES

Product	Colour	Mixing ratio by weight A:B	Viscosity at 23°C (mPas)	Pot life (min)	Special properties
			UR B7 - hardener/ B Co		
MITOPUR A1/3	beige	81,5 : 18,5	5 000 – 8 000	3-5	hard adhesive, good gap filling properties, compliant with food regulations EU 10/2011, temperature resistance from - 40°C to + 160°C VISION line product
MITOPUR A1/5	beige	81,5 : 18,5	5 000 – 8 000	5-7	
MITOPUR A4/3	beige	80:20	2 500 - 4 500	3-6	hard adhesive, excellent resistance, VISION line product
MITOPUR A8/3	beige, grey	81,5 : 18,5	1 500 - 4 500	2-5	hard adhesive, optimum flow properties VISION line product

### **MITOMONT** hybrid adhesives for

· Assembling gluing and sealing

#### **Characteristics of adhesives:**

- · Odourless, free of solvents, isocyanate & silicones
- Excellent adhesion on various surfaces, also on wet substrates
- Strong, flexible and highly resistant joint
- · High initial tack and pasty form allow gluing also on vertical surfaces
- · Fills cracks and unlevelled surfaces

#### **Characteristics of gluing joints:**

- · Permanently elastic and strong joint
- End strength till 4,0 N/mm<sup>2</sup>; 40 kg/cm<sup>2</sup>
- Can be overpainted (not recommended with solvent based paints)
- Weather resistant, also on seaside climate conditions
- Temperature resistant from 40°C to +90°C
- UV-stable
- Mould-resistant
- · Complaint with ISO 846 in antimicrobical characteristics

#### **SELECTION OF HYBRID ADHESIVES:**

Product	Base	Viscosity	Special properties		
		(mPas)			
MITOMONT HP 50 (white, black, grey)	STP hybrid	pasty	Bonding and sealing of almost all materials Complaint with ISO 846 in antimicrobics characteristics		
MITOMONT HP70 VISION (white)	STP hybrid	pasty	Bonding and sealing of almost all materials Complaint with ISO 846 in antimicrobics characteristics, EMICODE EC1 PLUS – very low emission		

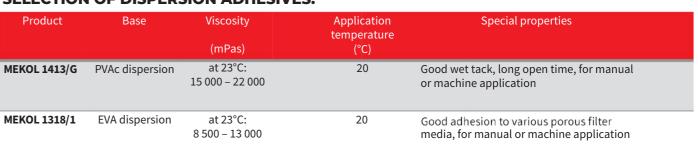
## **MEKOL** dispersion adhesives for

· Gluing & joining of filter media

#### **Characteristics of adhesives:**

- · Water based, solvent & odour free adhesives
- Easy processing & cleaning
- Cost saving

#### **SELECTION OF DISPERSION ADHESIVES:**





# Adhesive solutions for every manufacturing challenge.



TAILOR-MADE SOLUTIONS



CONNECTIONS
WITH OUR R&D
& TECHNICAL TEAMS



LAB & ON-SITE TESTING



FLEXIBLE SOLUTION DELIVERY







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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