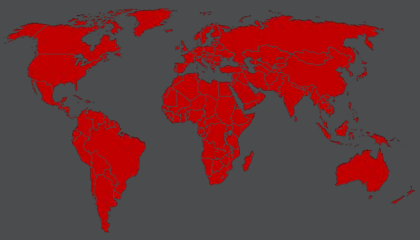
Portfolio Information

Adhesive Portfolio for the Automotive Industry





- Interiors
- Trunk
- Engine Compartment
- Filters
- Exterior
- High-Voltage Batteries for Electric Vehicles

Our Word is Our Bond

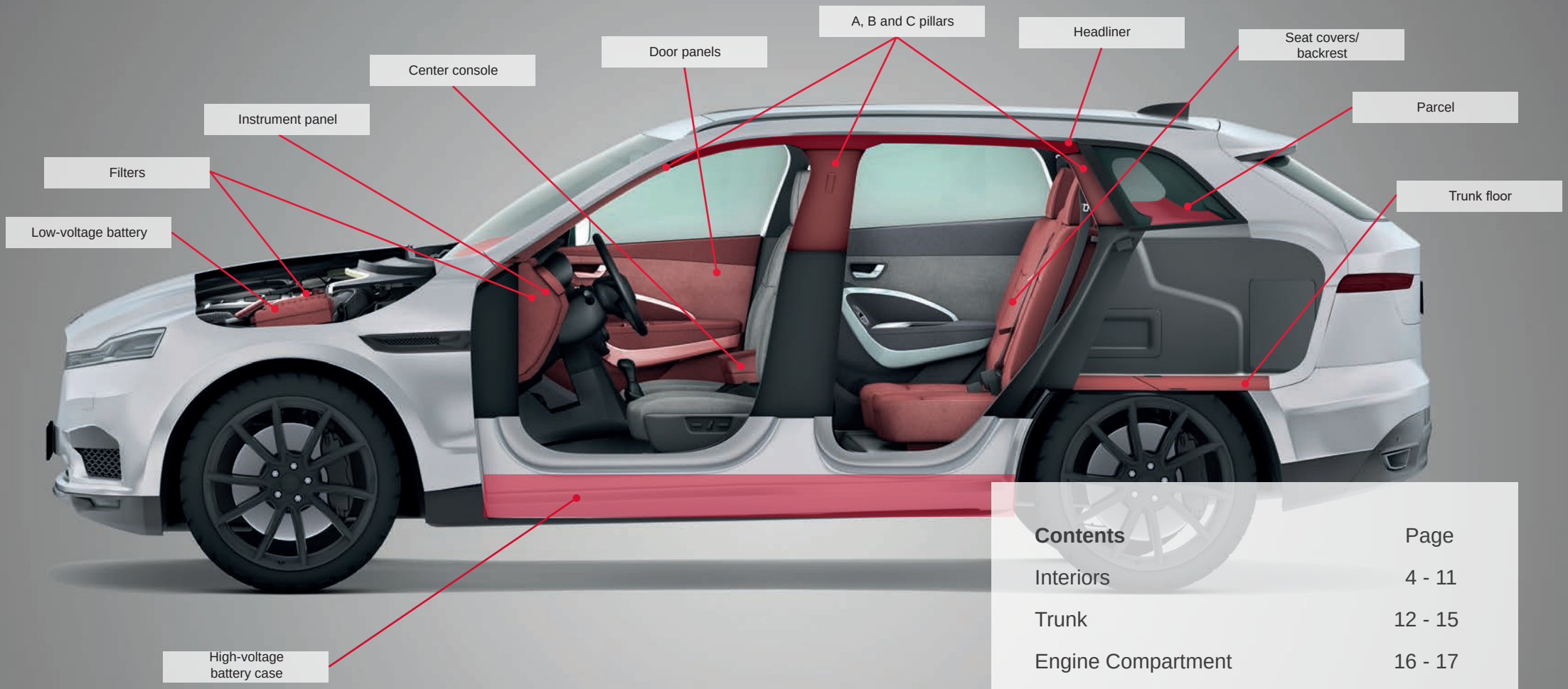
Jowat Adhesives

Powerful Adhesives for the Automotive Industry

Powerful and flexible adhesive solutions are an integral part of manufacturing processes in the automotive industry. Modern bonding technology ensures the optimum joining of different materials and facilitates lighter vehicles with higher energy efficiency and therefore reduced emissions. Jowat adhesives provide a significant contribution towards the realization of that aim in many aspects of automobile production.

The automotive industry is undergoing a technological revolution. Today already, innovative adhesives are facilitating refined interiors, resistant surfaces, invisible and highly reliable bondlines, or effective noise insulation.

Automobiles are one of the major applications of innovative bonding solutions from Jowat. We develop tailor-made processes and products in close cooperation with the automotive industry, its suppliers and machine manufacturers, for superior bonding results in virtually all areas of the automobile.



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Modern Adhesives for the Lamination of Automotive Interiors

Adhesives play a key role in the manufacture and assembly of the interior parts in an automobile. Jowat meets current process requirements and supplies products for the bonding procedures used - with tried-and-proven adhesive solutions and also adapted to specific applications.

- Lamination of instrument panels, door and side panels, center consoles, and A, B and C pillar trims
- Lamination of headliners and convertible tops
- Lamination of seat covers and backrests

Jowat supplies a broad portfolio of tailor-made adhesives with very high heat resistance which reaches far beyond the main applications of press laminating and vacuum deep-drawing.

To match the individual applications, the Jowatherm® PO hot melt adhesives, Jowatherm® PUR and Jowatherm® PUR MR hot melt adhesives, Jowat® solvent-based adhesives and Jowapur® PU dispersion adhesives provide a wide choice of different initial strengths and activation temperatures, edgefolding capabilities, heat and UV resistances, and non-blocking characteristics for the coating of rolled materials.


Pillar trim
Instrument panel
Upper door trims
Door panels
Armrest
Seats
Backrest
Center console

PUR Hot Melt Adhesives for the Lamination of Automotive Interiors

	Viscosity [mPas]	Processing temperature [°C]	Open time [s]	Reactivation temperature [°C]	Reaction time [d]	Remarks
Jowatherm® PUR 642.00	~23,000 at 140°C	110–150	~10 at 140°C (90 µm film)	>70	~3	all established application methods and tools, good roller processing characteristics
Jowatherm® PUR 642.30	~20,000 at 140°C	110–150	~45 at 140°C (90 µm film)	>70	~3	high creep resistance, long open time, good initial strength
Jowatherm® PUR MR 642.90	~23,000 at 140°C	110–150	~3 at 140°C (90 µm film)	>75	~3	no hazard labeling, good resistance to plasticizers, low VOC and fogging values
Jowatherm® PUR 613.79	~35,000 at 140°C	~140	~15 at 140°C (90 µm film)	>70	~ 3	high strength, low creep tendency
Jowatherm® PUR 613.10	~20,000 at 140°C	130–160	~1 at 140°C (90 µm film)	>55	~5	low reactivation temperature, also for hot forming
Jowatherm® PUR 613.90	~44,000 at 140°C	~140	~25 at 140°C (90 µm film)	>65	~7	for backrests with cotton urea resin, tack-free, low creep tendency
Jowatherm® PUR 630.80	~8,000 at 140°C	110–140	not applicable	>55	~3	long open processing via pressure, good wash resistance, for soft lamination

Product Characteristics of Jowatherm® PUR Hot Melt Adhesives

- High resistance to heat and fluids
- Wide range of adhesion and high strength
- High resistance to plasticizers
- Low processing temperatures
- Low reactivation temperatures
- Meets established tests and inspections from the automotive industry

PUR Hot Melt Adhesives with Hazard-Free Labeling



European legislators have classified one-component, moisture-curing PUR hot melt adhesives as hazardous material due to the content of free monomer isocyanate (mostly 4-4' methylene diphenyl diisocyanate - MDI). In addition, all processors of these products are required to complete a mandatory training in the safe handling of the products in future. The product family Jowatherm® PUR MR supplied by Jowat provides PUR hot melt adhesives with a significantly reduced content of free monomer isocyanate (MR = monomer-reduced). In accordance with the current EU regulation, these adhesives are not classified as hazardous material due to the monomer MDI content of less than 0.1 %.

The training obligation as well as the related costs and personnel effort become obsolete if MR technology is chosen.

POR Hot Melt Adhesives for the Lamination of Automotive Interiors

	Viscosity [mPas]	Processing temperature [°C]	Open time [s]	Reactivation temperature [°C]	Application methods	Remarks
Jowatherm® POR 629.72	~17,500 at 190°C	160–190	~8 at 170°C (90 µm film)	>100	nozzle roller	short open time, high initial strength
Jowatherm® POR 628.32	~3,500 at 190°C	140–190	~240 at 170°C (90 µm film)	>75	nozzle roller spraying	long open time, spraying possible
Jowatherm® POR 628.97	~10,250 at 190°C	160–190	~50 at 170°C (90 µm film)	>90	nozzle roller	wide range of adhesion, high creep resistance

Product Characteristics of Jowatherm® POR Hot Melt Adhesives

- Good adhesion to nonpolar substrates, e.g. polypropylene, NF-PP
- Slightly better heat resistance compared with thermoplastic hot melt adhesives
- Oxidation stability in the melt
- Free of diisocyanates
- Crosslinking with humidity/substrate moisture
- No hazard labeling

PO Hot Melt Adhesives for the Lamination of Automotive Interiors

	Viscosity [mPas]	Processing temperature [°C]	Open time [s]	Reactivation temperature [°C]	Application	Remarks
Jowatherm® PO 221.00	~23,200 at 200°C	180–200	~8 at 190°C (120 µm film)	>120	surface edgefolding assembly	“all-rounder,” good initial strength
Jowatherm® PO 230.20	~4,800 at 190°C	170–190	~15 at 190°C (120 µm film)	>110	surface edgefolding assembly	wide range of adhesion
Jowatherm® PO 238.20	~18,000 at 200°C	180–200	~10 at 190°C (120 µm film)	>120	surface edgefolding	tack-free, very good adhesion to TPO foils
Jowatherm® PO 238.80	~25,000 at 200°C	180–200	~4 at 190°C (120 µm film)	>170	surface edgefolding assembly	high heat resistance, i-panels may also be possible

Product Characteristics of Jowatherm® PO Hot Melt Adhesives

- Good adhesion to nonpolar substrates, e.g. polypropylene, NF-PP
- External pre-coating possible
- Easy and user-friendly processing
- Good adhesion to TPO foils

PU Dispersion Adhesives for the Lamination of Automotive Interiors

	Viscosity [mPas] (Haake 330 1/s)	Processing temperature [°C]	Pot life [h]	Reactivation temperature [°C]	Spraying	Initial strength	Surface tack	Edgefolding	Remarks
Jowapur® 158.97 **+ 5 % 197.65**	~304 at 20°C	>10	4–8	>60	●●●	●●●	●●●	●●●	real leather bonding, surface lamination incl. manual edgefolding
Jowapur® 157.07 **+ 5 % 197.65**	~280 at 20°C	>10	4–8	1-sided: >65 2-sided: permanent tack	●○○	●●○	●●○	●●○	contact adhesive (cold bonding) when applied to both surfaces
Jowapur® 157.27 **+ 5 % 197.65**	~193 at 20°C	>10	3–4	>65	●●○	●●●	●●○	●●○	flocking of glove compartments, mechanical processes, applications in Asia

Product Characteristics of Jowapur® PU Dispersion Adhesives

- Easy processing
- Manual processes are possible
- Can be repositioned (e.g. sewn covers)
- Good spraying characteristics
- Short pressing times inside the press
- No cooling inside the press necessary
- Low VOC and fogging values

Solvent-Based Adhesives for the Lamination of Automotive Interiors

	Based on	Solids content [%]	Viscosity [mPas]	Spray pattern	Flash-off time [min]	Open time [min]	Remarks
Jowat® 491.00	1-comp. CR	~25	~5,800 at 20°C	cannot be sprayed	5–20 at 20°C	-	high-viscosity product, wide range of adhesion
Jowat® 491.20	1-comp. CR	~17	~600 at 20°C	medium	5–20 at 20°C	-	low-viscosity product, wide range of adhesion
Jowat® 493.25 **+ 5 % 498.07 or 498.00**	2-comp. PU	~16	~210 at 20°C	finely	~ 40 at 20°C	~180	especially for plasticized PVC foils, high initial strength for edgefolding
Jowat® 493.60 **+ 5 % 498.07 or 498.00**	2-comp. PU	~19	~1.500 at 20°C	coarse	7–10 at 20°C	7–30	especially for plasticized PVC foils, good resistance to hydrolysis

Product Characteristics of Solvent-Based Jowat® Adhesives

- Easy processing
- Wide range of adhesion
- Short process times
- Good spraying characteristics

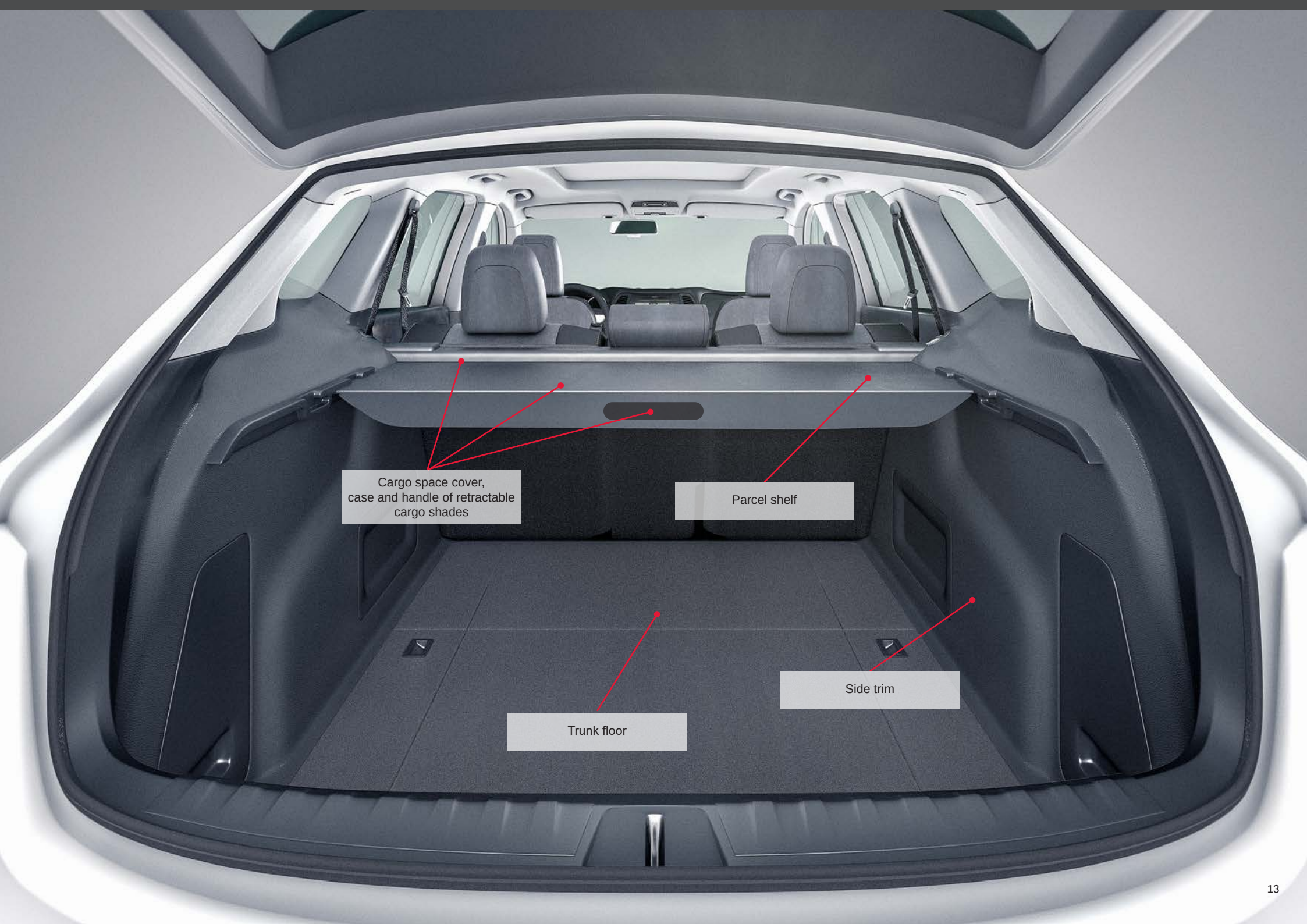
Strong and Flexible Bonding Solutions for Car Trunks

Car trunks have many different applications which require innovative adhesive solutions:

- Bonding of **trunk floors**
- Bonding of **side trims**
- Bonding of **parcel shelves**
- Bonding of **cases and handles of cargo space covers**

Jowat adhesives are a reliable and flexible partner in this part of the vehicle also. Thermoplastic hot melt adhesives join the carpet and the insulating fleece of trunk floors. Superior trunk trims such as carpet-laminated GMPU boards (fiberglass-reinforced honeycomb boards) of different geometries are generally bonded with polyurethane hot melt adhesives which can easily withstand the high restoring forces in edgefolding operations. All adhesives are suited for inline as well as semi-manual manufacturing processes and are developed to resist heat from direct sunlight.




Cargo space cover, case and handle of retractable cargo shades
Parcel shelf
Side trim
Trunk floor

Hot Melt Adhesives for Applications in the Trunk

	Based on	Viscosity [mPas]	Processing temperature [°C]	Open time [s]	Reactivation temperature [°C]	Reaction time [d]	Remarks
Jowatherm® PUR 613.79	PUR	~35,000 at 140°C	~140	~15 at 140°C (90 µm film)	>70	~3	high strength, low creep tendency
Jowatherm® PUR 612.11	PUR	~13,000 at 140°C	~140	~2 at 140°C (90 µm film)	>60	~3	immediately block-free, two-sided coating
Jowatherm® PUR 610.70	PUR	~41,500 at 140°C	110–140	~30 at 140°C (90 µm film)	>60	~5	long open time, for trunk covers (aluminum/steel with PES textiles / PVC foils)
Jowatherm® PUR 642.00	PUR	~23,000 at 140°C	110–150	~10 at 140°C (90 µm film)	>70	~3	all established application methods and tools, good roller processing Caracteristics
Jowatherm® PO 221.00	PO	~23,200 at 200°C	180–200	~8 at 190°C (90 µm film)	>120	-	“all-rounder”, easy processing
Jowatherm® PO 238.20	PO	~18,000 at 200°C	180–200	~ 10 at 190 °C (90 µm film)	>120	-	block-free, for pre-coating of rolled materials
Jowatherm® PO 238.60	PO	~5,800 at 200°C	180–210	~22 at 190°C (90 µm film)	>120	-	for GMPU boards und carpets



The New Generation of PO Hot Melt Adhesives for Bonding Core Packages and Low-Voltage Batteries

Adhesives used for bonding the sand cores in casting applications must meet very complex requirements. They have to provide a long open time, fast build-up of cohesion (= handling strength), high temperature resistance and high process reliability in the casting operation.

Hot melt adhesives based on polyolefin are increasingly being used for the assembly bonding of core packages. A major advantage of this type of adhesive is its considerably higher oxidation stability compared with the polyamide-based hot melt adhesives traditionally used for this application. This substantially reduces the amount of production downtimes due to maintenance and cleaning or disruptions and increases the process reliability.

Compared with the two-component epoxy resin adhesives also used for this application, PO hot melt adhesives provide several major benefits such as their very high resistance to acids, highly efficient single-component processing and outstanding adhesion to the polypropylene battery cases. In addition, they are optimally adapted for fully automated manufacturing processes with short cycle times due to their long open time and fast cohesion build-up. The benefits of these adhesives go beyond the lifecycle end of the bonded product and support the recycling. PO hot melt adhesives can be recycled together with the PP cases of the battery without separation.



PO Hot Melt Adhesives for Sand Core Bonding

	Based on	Viscosity [mPas]	Processing temperature [°C]	Open time [s]	Setting time [s]	Softening point [°C]	Remarks
Jowatherm® PO 230.90	PO	~1,900 at 180°C	170–190	~20 at 190°C (2 mm bead)	~2 at 190°C (2 mm bead)	~130 (Ring & Ball)	long open time
Jowatherm® PO 238.97	PO	~1,100 at 200°C	180–200	~15 at 190°C (2 mm bead)	~2 at 190°C (2 mm bead)	~159 (Ring & Ball)	“all-rounder”, very precise melting point
Jowatherm® PO 230.70	PO	~1,520 at 190°C	180–200	~12 at 190°C (2 mm bead)	~6 at 190°C (2 mm bead)	~155 (Ring & Ball)	short open time

PO Hot Melt Adhesive for Low-Voltage Batteries

	Based on	Viscosity [mPas]	Processing temperature [°C]	Open time [s]	Remarks
Jowatherm® PO 265.00	PO	~2,700 at 190°C	170–190	~20 at 190°C (2 mm bead)	good adhesion to PP sub-strates/separators, very high resistance to acids

Manufacturing of Filter Media

Passenger compartment filters and activated carbon filters for the purification of the air inside vehicles are manufactured by joining several layers of filter materials with each other in successive process steps. The finished filter media protects people from fine dust, pollen, spores, soot, bacteria as well as odours and gaseous pollutants like benzene or ozone.

Jowatherm® PO and **Jowatherm® PUR** adhesives provide very good results in the lamination process of activated carbon and multi-layer filter media with small application amounts. The low adhesive grammage permits the open surface areas of the activated carbon, when bonded to the carrier substrate, to remain as large as possible for the actual function of filtering and maintaining clean air. These Jowat adhesives developed for filter media lamination, not only have a neutral odour, but also reach very low fogging and emission values.
Jowatherm® PUR adhesives meet the high levels of heat resistance demanded by the automotive manufacturers and facilitate the production of passenger compartment filters in OEM quality.



Hot Melt Adhesives for Filter Manufacturing

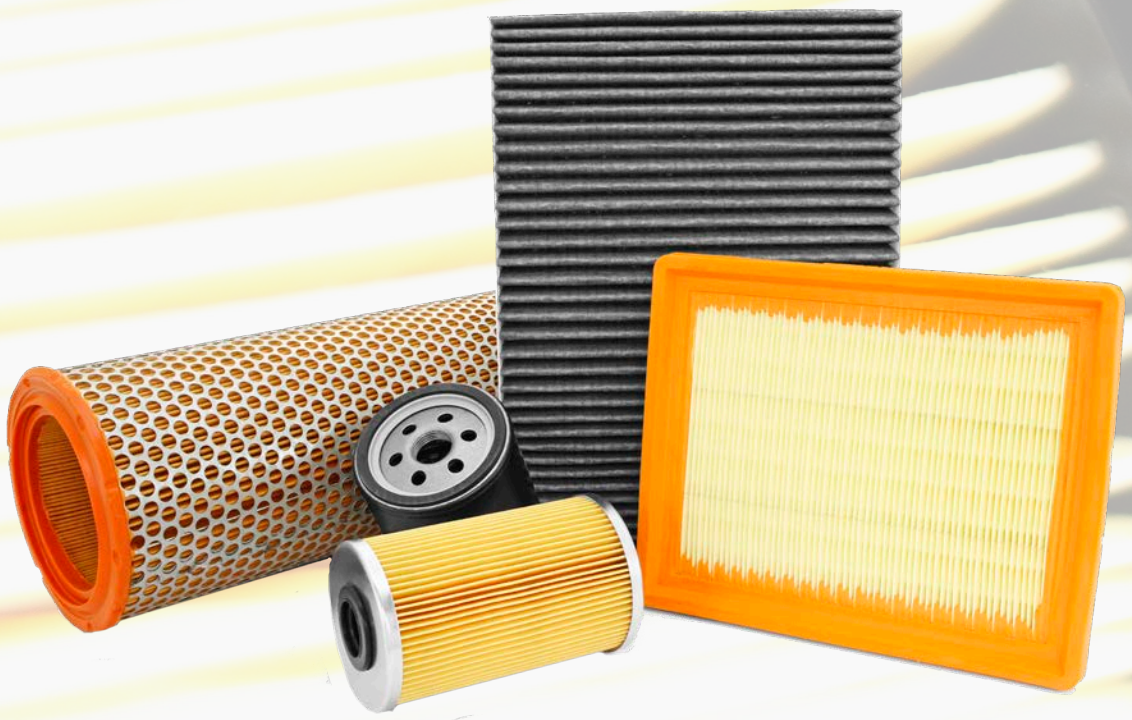
	Based on	Appearance	Viscosity [mPas]	Processing temperature [°C]	Softening range [°C]	Open time [s]	Remarks
Jowatherm® PO 238.75	PO	yellowish translucent	~15,000 at 170°C	160–180	~110 (Kofler)	~28 at 170°C (2 mm bead)	activated carbon binding, short open time for fast processes
Jowatherm® PO 263.45	PO	colorless opaque	~4,000 at 180°C	170–190	~150 (Kofler)	~24 at 180°C (2 mm bead)	laminating, wide range of adhesion
Jowatherm® PUR 613.40	PUR	yellowish translucent	~21,000 at 140°C	130–150	~80* (Ring & Ball)	~10 at 140°C (2 mm bead)	laminating, block-free and high initial strength
Jowatherm® PUR 614.18	PUR	colorless opaque	~8,000 at 110°C	100–120	~68* (Ring & Ball)	~75 at 110°C (2 mm bead)	activated carbon binding, “all-rounder” for efficient application amount
Jowatherm® PUR MR 614.50	PUR MR	colorless opaque	~8,000 at 110°C	100–120	~60* (Ring & Ball)	~75 at 110°C (2 mm bead)	no hazard labeling, activated carbon binding, “all-rounder” for efficient application amount

* non-crosslinked adhesive film

Frame Bonding and Pleating

Adhesives from Jowat stabilise the filter and remain flexible throughout the entire filter life. And this even when the composite material is exposed to mechanical stress or high temperatures.

Jowatherm® and **Jowatherm® PO** adhesives facilitate a quick downline processing due to their short open times and high initial strengths, and, thereby, support the fast manufacturing processes in filter pleating. Jowat hot melt adhesives for filter frame bonding are characterised by their technical details which are adapted to the speed of production processes.



Hot Melt Adhesive for Pleating

	Based on	Appearance	Viscosity [mPas]	Processing temperature [°C]	Softening range [°C]	Open time [s]	Remarks
Jowatherm® PO 263.85	PO	colorless	~33,150 at 180°C	170–190	~160 (Ring & Ball)	~18 at 180°C (2 mm bead)	air intake filter for engines, high heat resistance

Hot Melt Adhesives for Filter Bonding

	Based on	Appearance	Viscosity [mPas]	Processing temperature [°C]	Softening range [°C]	Open time [s]	Remarks
Jowatherm® PO 238.88	PO	yellowish	~31,000 at 190°C	180–200	~160 (Kofler)	~18 (2 mm bead)	antimicrobial
Jowatherm® PO 262.95	PO	colourless, opaque	~8,375 at 150°C	140–160	~115 (Ring and Ball)	~42 (2 mm bead)	wide range of adhesion
Jowatherm® PO 263.05	PO	colourless, transparent	~26,000 at 190°C	180–200	~160 (Ring and Ball)	~20 (2 mm bead)	manual and automated processes
Jowatherm® PO 263.15	PO	whitish	~38,000 at 190°C	180–200	~160 (Kofler)	~12 (2 mm bead)	automated processes
Jowatherm® PO 263.17	PO	whitish	~41,000 at 190°C	180–200	~160 (Kofler)	~22 (2 mm bead)	low flammability
Jowatherm® PO 263.30	PO	yellowish	~7,100 at 190°C	180–200	~130 (Kofler)	~30 (2 mm bead)	manual processes
Jowatherm® PO 264.50	PO	colourless	~11,700 at 180°C	170–190	~95 (Kofler)	~35 (2 mm bead)	manual processes

Hot Melt Adhesives for Mounting Brackets, Emblems, Trims and Assembly Bonding

Self-adhesive sound deadening materials, e.g. thick acoustic foils or vibration-absorbing panels, reduce road and engine noise and they are usually concealed to the eye, bonded directly to the painted metal in behind door panels, on the body floor or in the trunk. Copolymer dispersions are characterized by a neutral odor, good heat resistance and low VOC values and are the adhesives of choice for this application. Alternatively, the sound deadening materials may also be bonded with special, minimal-odor PSA hot melt adhesives which increase the efficiency of the actual materials due to their vibration-absorbing properties.

In addition, Jowat supplies adhesives for gluing the mounting brackets and retainers needed for installing sound insulation panels in the wheel housing to reduce the noise from the wheels and road. Powerful PUR hot melts are highly resistant to all weathering conditions and are ideal for these application.

The Jowat portfolio also supplies PO and PUR hot melt adhesives which have been adapted to the multifaceted requirements for bonding mounting brackets in cars. The latest generation of PO hot melt adhesives are suitable for bonding mounting brackets and retainers as well as for edgefolding and for flat lamination. Thereby, they facilitate highly efficient manufacturing processes.



Hot Melt Adhesives for Mounting Brackets, Emblems, Trims and Assembly Bonding

	Based on	Viscosity [mPas]	Processing temperature [°C]	Open time [s]	Setting time [s]	Softening point [°C]	Remarks
Jowatherm® PO 230.20	PO	~4,800 at 190°C	170–190	~25 at 190°C (2 mm bead)	~ 3 at 190 °C (2 mm bead)	~142 (Ring & Ball)	good adhesion, long open time
Jowatherm® PO 221.00	PO	~23,200 at 200°C	180–200	~25 at 190°C (2 mm bead)	~ 15 at 190 °C (2 mm bead)	~155 (Ring & Ball)	“all-rounder,” high heat resistance
Jowatherm® PUR 610.61	PUR	~13,000 at 120°C	~120	~110 at 140°C (2 mm bead)	~ 65 at 140 °C (2 mm bead)	~55* (Ring & Ball)	wide range of adhesion, long open time
Jowatherm® PUR 612.61	PUR	~20,000 at 120°C	110–130	~65 at 140°C (2 mm bead)	~ 15 at 140 °C (2 mm bead)	~65* (Ring & Ball)	wide range of adhesion, high initial strength
Jowatherm® PUR MR 612.90	PUR MR	~24.000 at 120°C	110–130	~50 at 120°C (3 mm bead)	~25 at 120°C (3 mm bead)	~61* (Ring & Ball)	“all-rounder” with hazard-free labeling

* non-crosslinked adhesive film

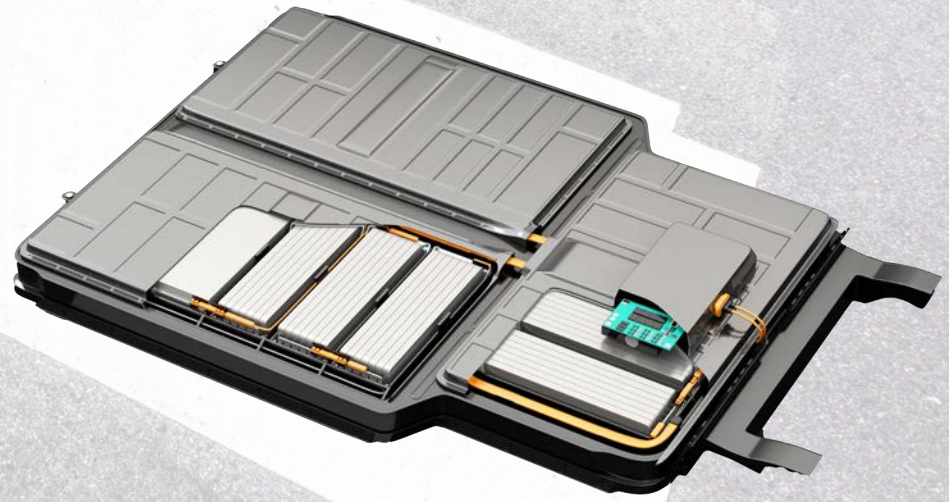
Adhesives for Noise Insulation / Deadening

	Based on	Viscosity [mPas]	Processing temperature [°C]	Solids content [%]	Softening point [°C]	Remarks
Jowacoll® 761.10	copolymer	~12,000 at 20°C	>10	65	-	pressure-sensitive dispersion adhesive with permanent tack, for giving self-adhesive properties to textiles/foams
Jowatherm® 245.85	SBC	~13,000 at 160°C	170–190	-	~105 (Kofler)	pressure-sensitive hot melt adhesive with permanent tack, for giving self-adhesive properties to textiles/foams

High-Voltage Batteries for Electric Vehicles

E-Mobility has made its way into everyday life, with the introduction of full-electric and hybrid vehicles at the majority of global automotive manufacturers. High-voltage batteries are characterized by a wide variety of designs, structures, materials and capacities, designed by OEMs depending on the requirements.

Jowat adhesives facilitate reliable connections in the production of battery components and systems. They help OEMs and tier-1 to tier-n suppliers tackle new challenges in this dynamic landscape. Whether assembly bonding in battery enclosures, thermal conductivity, sealing applications or the gluing of battery covers—Jowat supplies high-quality adhesive solutions adapted to industrial applications.



Adhesives for Battery Components in Electric Vehicles

	Based on	Viscosity [mPas]	Processing temperature [°C]	Open time [s]	Setting time [s]	Softening range [°C]	Remarks
Jowatherm® PO 230.20	PO	~4,800 at 190°C	170–190	~25 at 190°C (2 mm bead)	~3 at 190°C (2 mm bead)	~105 (Kofler)	good adhesion, long open time
Jowatherm® PO 221.00	PO	~23,200 at 200°C	180–200	~25 at 190°C (2 mm bead)	~15 at 190°C (2 mm bead)	~115 (Kofler)	“all-rounder,” high heat resistance
Jowatherm® PUR 610.61	PUR	~13,000 at 120°C	~120	~110 at 140°C (2 mm bead)	~65 at 140°C (2 mm bead)	~55* (Kofler)	good adhesion to flame-retardant materials, fiber-plastic compound, aluminum
Jowatherm® PUR 612.61	PUR	~20,000 at 120°C	110–130	~65 at 140°C (2 mm bead)	~15 at 140°C (2 mm bead)	~65* (Kofler)	wide range of adhesion, medium open time
Jowatherm® PUR MR 612.90	PUR MR	~24.000 at 120°C	110–130	~50 at 120°C (3 mm bead)	~25 at 120°C (3 mm bead)	~61* (Ring & Ball)	“all-rounder” with hazard-free labeling

* non-crosslinked adhesive film

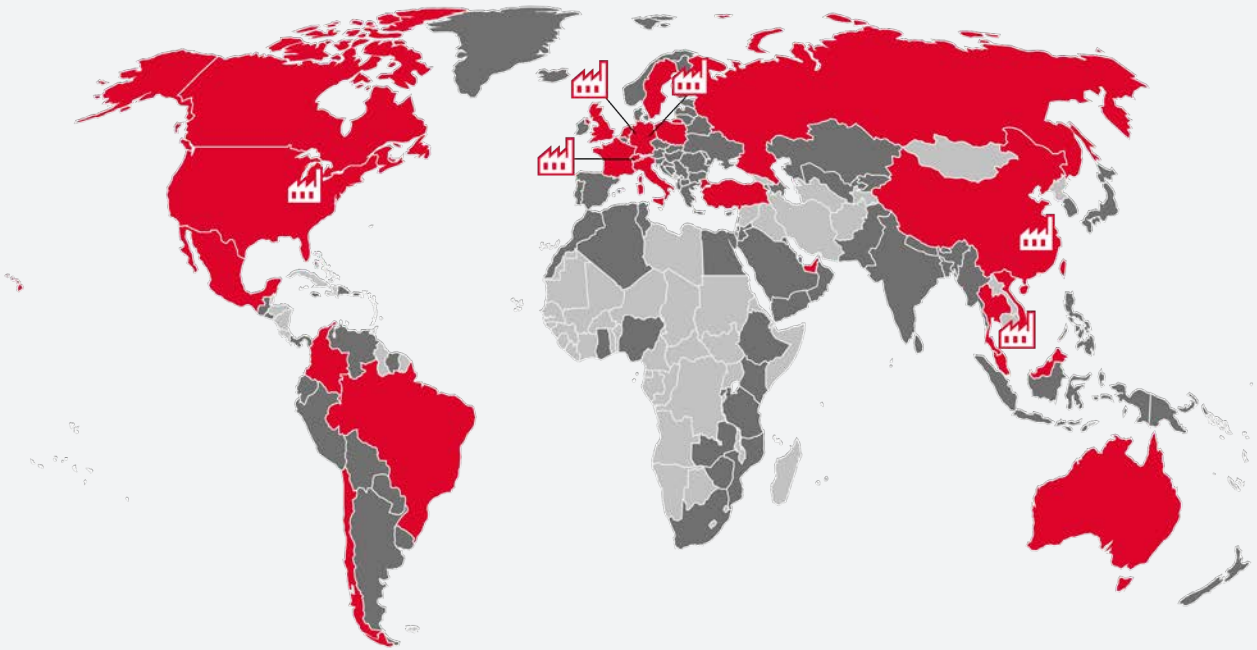
Jowat - Our Word is Our Bond

Jowat SE with headquarters in Detmold is one of the world's leading suppliers of industrial adhesives. These are mainly used in woodworking and furniture manufacture, in the paper and packaging industry, for graphic arts, in the textile, automotive as well as in the electrical industry. The company was founded in 1919 and has manufacturing sites in Germany in Detmold and Elsteraue, plus four other producing subsidiaries, Jowat Corporation in the USA, Jowat Swiss AG, Jowat Manufacturing in Malaysia and Jowat China Adhesives. The supplier of all adhesive groups is manufacturing over 100,000 tonnes of adhesives per year, with about 1,300 employees. A global sales structure with 23 subsidiaries plus solution partners is guaranteeing local service with close customer contact.



Have We Sparked Your Interest?

Jowat actively supports innovation in the bonding of automotive parts and multi-layer components with a deep understanding of the materials to be bonded - be it special physical properties, different material combinations, requirements for high resistance and durability in exterior applications, or energy- and cost-efficiency and a growing variety of application fields.



Manufacturing locations
Markets with Jowat Group companies
Markets with Jowat distribution partners

We provide a comprehensive advisory service and competent know-how for the entire process: From the continual search for and testing of new, sustainable raw materials, to the development of innovative adhesive products in close contact with sub-suppliers and processors, to application-related support, and to individual process analyses. For many decades, Jowat solutions for modern wood processing have played a key role in the optimization of products and processes - in a future-oriented and sustainable manner.

Have we sparked your interest? Contact us! We look forward to working together.

The information given in this leaflet is based on test results from our laboratories as well as on experience gained in the field, and does in no way constitute any guarantee of properties. Due to the wide variety of different applications, substrates, and processing methods that are beyond our control, no liability may be derived from these indications nor from the information provided by our free technical advisory service. Before processing, please request the corresponding data sheet and observe the information in it. Customer trials under everyday conditions, testing for suitability in normal processing conditions, and appropriate fit-for-purpose testing are absolutely necessary. For the specifications and for further information, please refer to the latest technical data sheets.

Jowat®
Adhesives

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