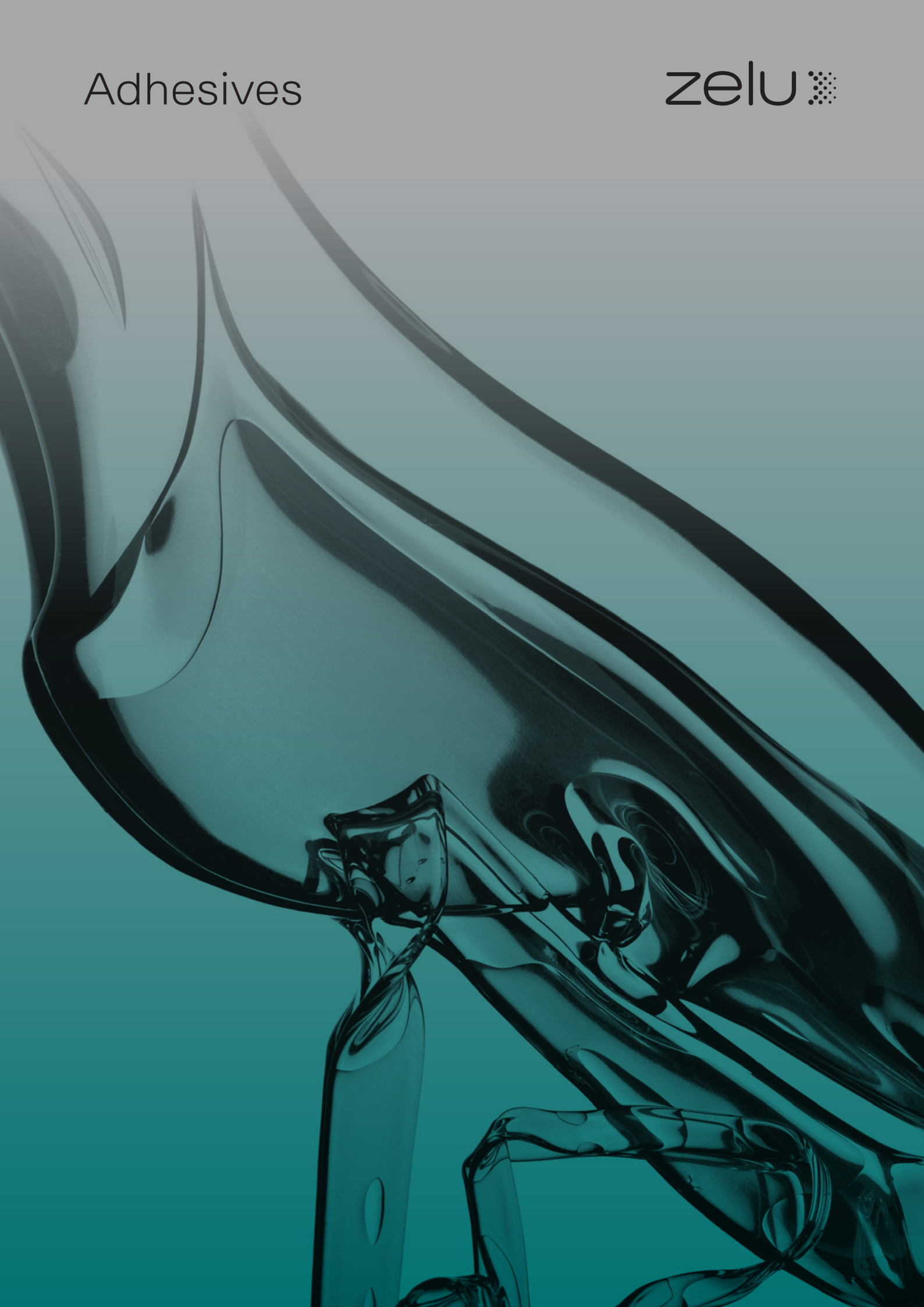


Adhesives

zelu 



Zelu is the one-stop manufacturer of high-grade adhesives and polyurethane foam systems, providing you with “quality made in Germany” wherever you may be in the world, coupled with prompt delivery, reliability and expertise.

We have an in-depth knowledge of the manufacturing of customised solutions – each and every one of which is guaranteed to be optimally tailored to suit the desired application. From large-volume orders to special formulations, we can make it happen.

Our strong, highly innovative adhesives are highly suitable for use in state-of-the-art production processes. Zelu adhesives are renowned for their outstanding efficiency, process security, flexibility and durability, meeting all requirements when it comes to product, process and occupational safety, along with environmental compatibility. They can even be used to bond complex geometries and material combinations without any difficulty.

# Solvent-Based Adhesives

zelukleber® zeluflex® zelugen®

Solvent-based adhesives from Zelu are used mainly for tough bonds under tension. Zelukleber® is just the thing for tackling the many and varied tasks involved in the lamination and furniture upholstery industries. Zeluflex® is ideally used for bonding rigid carrier materials such as wood, for example when assembling sofas and chairs, but also for foldbacks (tough bonds) on interior components in the car industry. This is where Zelugen® also proves its strength: This adhesive is suitable for interior bonding applications involving textiles, PVC film, PVC foam, PC/ABS or ABS/PS.

## Composition

Our Zelukleber®, Zeluflex®- and Zelugen®-adhesives are based on styrene butadiene rubber, polychloroprene rubber or thermoplastic polyurethane which are dissolved in organic solvents.

## Processing

In the case of Zelu solvent-based adhesives, the polymer is dissolved in organic solvents and applied in this form. These adhesives are applied to either one or both sides using a spray gun. Both Zeluflex® and Zelugen® can also be applied by brush. The adhesive sets as the solvent evaporates.

## Properties and benefits

- dissolved in toluene-free organic solvents
- application on one and/or both sides, depending on the type of bond
- varying processing times – from a few seconds to 30 minutes
- can be reactivated (Zeluflex® and Zelugen®)
- easy to spray

Product	Zelukleber® on SBS/SIS basis	Zeluflex® on CR basis	Zelugen® on TPU basis
Solids content in %	40 to 75	20 to 25	15 to 25
Viscosity [mPas]	100 to 5.000	250 to 2.500	500 to 6.000
Wet life at RT [min.]	instant to 30	2 to 45	instant to 10
Processing	Double-sided and/or one-sided	As contact adhesive double-sided	Double-sided or one-sided (activation)
Reactivatability	No	Yes	Yes
Plasticiser resistance	Limited	Yes	Yes
Thermal stability	Good	Very good	Very good

# Hotmelt Adhesives

zelumelt®

Zelumelt®-hotmelt adhesives are especially strong and resistant to ageing. They are also ideally suited for use in mattress production and the manufacture of upholstered furniture, to name just a few applications. Our PSA-hotmelt adhesives can also be deployed for the coating of carrier materials, for example in the car industry.

## Composition

Zelu hotmelt adhesives are based on polymers such as SBS or SBS/SIS rubber, APAO or EVA.

## Processing

Zelumelt®-hotmelt adhesives are in a solid form at room temperature and have to be melted prior to processing. The liquefied adhesive is quick and easy to apply to a surface by spraying or using nozzles or rolls. Cohesion is established when the hotmelt cools.

## Properties and benefits

- good initial and final strength
- flexible to high-tensile bond seam
- customised processing parameters
- tack-free to permanently tacky
- low odour
- low in emissions
- solvent-free
- cold-resistant

Product	Zelumelt® on SBS/SIS basis	Zelumelt® on APAO basis	Zelumelt® on EVA basis
Solids content in %	100	100	100
Viscosity [mPas]	2.500 to 25.000	4.000 to 15.000	3.000 to 6.000
Melting point [°C]	70 to 100	80 to 160	70 to 100
Working temperature [°C]	150 to 165	160 to 180	160 to 170
Wet life at RT [min.]	1 to 3	1 to 2	approx. 30 s
Thermal stability	Yes	Yes	Yes
After-tack	Yes	No	No

# Water-Based Dispersion Adhesives

curvalin®

Our Curvalin® water-based dispersion adhesives are completely free of solvents and easy to process. This makes them suited to many different applications in a wide range of industrial sectors. For example for lining roofs in car interiors, manufacturing upholstered furniture in the foam-processing industry or film lamination.

## Composition

Curvalin®-type adhesive polymers are an aqueous-phase dispersion and are available on a CR (polychloroprene), PUR (polyurethane), PVAC (polyvinyl acetate) and acrylate basis.

## Processing

They can be processed as one-component or two-component systems. As a rule, both systems can be conveyed with standard pumps and applied by spraying or using rolls. The dispersion particles come closer and closer together as the water evaporates. Once the distance falls below a critical limit, the particles bond to each other on contact. Cohesion develops at this stage.

## Properties and benefits

- free of solvents and NMP/NEP
- free of APEO (alkylphenol ethoxylates)
- high solid content
- high shear stability
- heat activated
- short airing times
- good resistance to thermal distortion
- low in emissions

Product	Curvalin® on CR basis, 1-component	Curvalin® on CR basis, 2-component	Curvalin® on PUR basis, 2-component	Curvalin® on PVAC basis	Curvalin® on Acrylat basis
Solids content in %	approx. 60	40 to 60	approx. 50	approx. 50	50 to 70
Viscosity [mPas]	150 to 1.300	20 to 300	500 to 45.000	5.000 to 20.000	300 to 10.000
Coverage [g/m² wet]	60 to 80	60 to 80	120 to 140	60 to 80	80 to 120
Airing time at RT [min.]	instant to 2	instant	30 to 40	-	-
Wet life at RT [min.]	10	20	Pot life: 6 to 8 hrs	-	-
Reactivability	Limited	Limited	Yes	No	No
Cross-linkability	No	Yes	Yes, with Zeludur 300	Yes (D4)	No

# Polyurethane Foam Systems from Zelu

In addition to adhesives, we can also provide you with a wide range of polyurethane foam systems. PUR foams are incredibly versatile and the manufacturing requires a high level of expertise. Zelu offers you tailor-made solutions from soft to hard. Individually adjustable system parameters such as good flowability, high process stability and fast reaction enable short cycle times. Ensuring ease of use and efficient production for a huge range of applications in the automotive & transport, sport & leisure, filtration, furniture and industry & construction. Zelu has the solution.



Es liegt außerhalb unserer Kontrollmöglichkeiten, wie und zu welchem Zweck Sie unsere Produkte, unsere technische Unterstützung und unsere Informationen (in Wort, Schrift oder durch Produktionsbewertung), einschließlich vorgeschlagener Formulierungen und Empfehlungen, anwenden und einsetzen. Daher ist es unerlässlich, dass Sie unsere Produkte, unsere technische Unterstützung und unsere Informationen selber zu Ihrer eigenen Zufriedenheit daraufhin prüfen, ob diese für die von Ihnen beabsichtigten Zwecke und Anwendungen geeignet sind. Der Verkauf aller Produkte erfolgt – sofern nicht schriftlich anders mit uns vereinbart – ausschließlich nach Maßgabe unserer Allgemeinen Verkaufsbedingungen, die wir Ihnen auf Wunsch gerne zusenden. Alle Informationen, insbesondere technische Daten und sämtliche technische Unterstützung erfolgen ohne Gewähr (jederzeitige Änderungen vorbehalten). Es wird ausdrücklich vereinbart, dass Sie jegliche Haftung (Verschuldenshaftung, Vertragshaftung und anderweitig) für Folgen aus der Anwendung unserer Produkte, unserer technischen Unterstützung und unserer Informationen selber übernehmen und uns von aller diesbezüglichen Haftung freistellen. Keine hierin gemachte Aussage darf als Empfehlung verstanden werden, bei der Nutzung eines Produkts etwaige Patentansprüche in Bezug auf Werkstoffe oder deren Verwendung zu verletzen. Es wird keine konkludente oder tatsächliche Lizenz aufgrund irgendwelcher Patentansprüche gewährt.

# foam and adhesive expertise

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