

wevo

CUSTOMISED EPOXY SOLUTIONS

WEVOPOX FOR ELECTRICAL AND ELECTRONIC APPLICATIONS



WEVOPOX

OUR CUSTOMISABLE EPOXY SYSTEMS

Our WEVOPOX products stand up to the most diverse challenges. Thanks to the wide range of services covered, we are able to develop custom solutions for our customers.



THERMAL CONDUCTIVITY

Thermally conductive solutions ensure better temperature control and fewer hotspots.

- Thermal conductivity up to 2 W/m-K
- Higher power densities
- Cooling of components
- Good flow behaviour despite high thermal conductivity



FLAMMABILITY

Our products with flame-retardant properties are certified according to various test standards.

- EN 45545-2 HL3 in R22/R23
- UL 94 V, HB and 5V
- Glow Wire Flammability Index (GWFI)
- Hot Wire Ignition (HWI)
- High-current Arc Ignition (HAI)



HIGH RESISTANCE

For applications that demand high levels of resistance in different areas.

- Resistance to a wide range of chemicals
- Temperature resistance up to 180°C
- Mechanical strength across a wide range of applications
- Low susceptibility to cracking



ELECTRICAL PROPERTIES

High dielectric strength and good dielectric properties enable their use in a very wide range of electrical applications.

- Low dielectric constants for improved transmission of electromagnetic signals
- Comparative Tracking Index (CTI 600)
- Relative Temperature Index (RTI Elec)
- High dielectric strength > 30 kV/mm

WEVO – TRADITION OF INNOVATION

We are a leading specialist in custom casting/potting solutions as well as adhesives and sealants based on polyurethane, epoxy and silicone. More than 75 years of experience in development and applications go into each and every one of our products. The outcome: optimum solutions for reliable and safe components.

OUR CORE COMPETENCIES

Tailor-made solutions: We develop our formulations according to the product and processing requirements of our customers.

Custom services: As an expert partner, we work hand in hand with our customers from the initial product idea through to series production.

Flexible logistics: We use all shipping methods, including isothermal transportation and custom packaging concepts.

Knowledge transfer: Technical and chemical expertise go hand in hand at Wevo – from customer seminars to collaboration with research institutions or panels of experts.

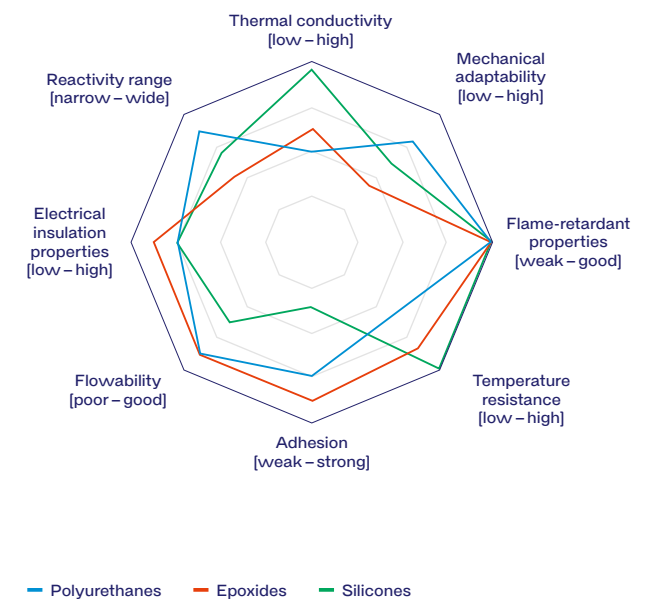
CERTIFICATIONS AND APPROVALS

Our uncompromising product quality is a direct result of adhering to strict guidelines and standards for chemical materials and their safe use.

IATF 16949 · ISO 9001 · ISO 14001 · ISO 45001 · UL 94 · RTI · HWI/HAI · DIN EN 45545-2 · DIN EN 60216-1 · ExPlast · RoHS · REACH SVHC

OUR MATERIALS AT A GLANCE

We work with customers of all sizes, from all sectors and industries. Thanks to our broad portfolio, we can find the right solution for every application.





EXTRACT FROM EPOXY PRODUCT OVERVIEW

WEVOPOX		A 50	VE	30010	2003 FL	36001 FL	34020	389	32702	32703	8260 FL/60	2511 FL	2513	34003	34021
WEVODUR		BX	263	5007	5004	5001	5001	958	5008	5009	1018/25	1005, 1003/07	1003/07	1018	1003/07
Mixing ratio (parts by weight)		100:50	100:45	100:33	100:20	100:10	100:10	100:30	100:10	100:12	100:29	100:16	100:13	100:25	100:25
Mixed viscosity at 22°C [mPa·s]	Rotational viscometer	12,000–18,000	500–700	1,000–2,000	2,700–3,200	3,500–6,500	8,000–15,000	15,000–20,000	2,000–3,500	5,000–8,000	3,000–5,000	2,000–3,000	3,000–6,000	4,000–8,000	2,500–4,500
Reactivity at 22°C [min.] [*]	Rotational viscometer/rheometer	60–100	40	50	120	180–240	120	25–35	60–80	30 (120°C)	30 (120°C)	30/90 (100°C)	30 (120°C)	30 (120°C)	20 (120°C)
Density of resin at 22°C [g/cm ³]	DIN EN ISO 2811-1:2016-08	1.14–1.19	1.15–1.18	1.13–1.18	1.60–1.64	1.74–1.80	1.78–1.86	1.43–1.47	1.78–1.85	1.65–1.70	1.68–1.78	1.85–1.89	2.35–2.40	1.85–1.93	1.78–1.86
Density of hardener at 22°C [g/cm ³]	DIN EN ISO 2811-1:2016-08	0.95–0.99	0.99–1.02	0.94–0.98	0.93–0.97	0.97–1.01	0.97–1.01	1.80–1.84	0.95–0.99	1.00–1.04	1.14–1.24	1.18–1.22	1.14–1.24	1.18–1.22	1.14–1.24
Shore hardness D	DIN ISO 7619-1:2012-02	80–85	80–85	82–88	45–49	85–90	85–95	80–85	82–90	80–90	88–94	84–88	90–95	85–90	88–95
Operating temperature [°C]		-25 up to +120	-30 up to +130	-30 up to +130	-40 up to +130	-40 up to +180	-40 up to +180	-40 up to +140	-40 up to +130	-40 up to +155	-40 up to +160	-40 up to +155	-40 up to +180	-40 up to +155	-40 up to +180
E modulus [N/mm ²]	DIN EN ISO 527-2:2012-06	2,300	3,200	2,600	35	6,000	6,100	6,500	6,200	5,000	8,600	9,700	11,000	6,000	14,300
Thermal conductivity [W/m·K] (pressureless)	DIN EN ISO 22007-2:2015-12	0.2	0.2	0.2	0.7	1.1	0.8	0.7	0.3	0.6	0.9	1.0	1.4	0.7	0.7
Glass transition temperature (Tg) [°C]	TMA ISO 11359-2:1999-10	94	49	98	2	51	48	75	76	117	90	47	52	147	64
Coefficient of expansion [ppm/K]	TMA ISO 11359-2:1999-10	81 < Tg 173 > Tg	78 < Tg 163 > Tg	48 < Tg 159 > Tg	61 < Tg 161 > Tg	40 < Tg 110 > Tg	46 < Tg 150 > Tg	58 < Tg 215 > Tg	56 < Tg 155 > Tg	53 < Tg 157 > Tg	40 < Tg 146 > Tg	48 < Tg 130 > Tg	29 < Tg 91 > Tg	43 < Tg 125 > Tg	42 < Tg 138 > Tg
Water absorption [%]	30 days, 22°C	0.8	0.8	0.6	1.5	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.2
Flammability	UL 94	HB	HB	HB	V-0 6 mm ^{**}	V-0 2 mm	HB	HB	HB	HB	V-0 6 mm ^{**}	V-0 6 mm	HB	HB	HB
Dielectric strength [kV/mm]	DIN EN 60243-1:2014-01	–	25	–	–	–	30	–	–	–	33	–	20	–	36
Volume resistivity [Ω·cm]	DIN EN 62631-3-1:2017-01	10 ¹⁶	10 ¹⁵	10 ¹⁵	10 ¹²	10 ¹⁵	10 ¹⁴	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁴	10 ¹⁵
Dielectric constant ε (at 50 Hz, 23°C)	DIN EN IEC 62631-2-1:2018-12	3.1	4.1	3.7	7.8	4.3	4.2	4.2	4.7	5.1	3.8	4.8	4.8	3.6	3.4
Loss factor tan δ (at 50 Hz, 23°C)	DIN EN IEC 62631-2-1:2018-12	0.013	0.020	0.012	0.180	0.006	0.024	0.005	0.011	0.022	0.014	0.030	0.016	0.003	0.010

All application parameters refer to processing at room temperature. All mechanical, thermal and electrical properties are based on complete curing.
^{*} The indicated range of pot life corresponds with current standard versions. Adjustment of pot life is possible.
^{**} UL listing under file No. E108835

For a more detailed technical description of our systems please refer to the corresponding data sheets which are available for all products. Please see our special notes on the back of this leaflet.

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