

## WEVO-CHEMIE product program polyurethane casting resins

WEVOPUR		PD 4	PD 4431 FL	PD 52	304	323	390	403	403 FL	512 FL	552 FL	570	590 FL	925/1M	925/71FL	930 M	7210 FL	9251 FL
WEVONAT		385	300	385	300	300	300	300	300 RE	900	300	300	300 M	600	900	600	507	300 RE
Mixing ratio (parts by weight)		100 : 34	100 : 11	100 : 26	100 : 50	100 : 10	100 : 30	100 : 14	100 : 14	100 : 16	100 : 20	100 : 20	100 : 18	100 : 30 - 33	100 : 10	100 : 33	100 : 43	100 : 15
Viscosity of mixture at 22°C [mPa·s]	Rotational viscometer	1.200-1.600	1.700-2.100	1.200-2.000	400-600	700-800	800-900	2.500-3.500	2.000-2.500	600-900	1.000-1.300	1.500-2.000	1.200-2.000	850-1.100	3.000-4.000	1.800-2.200	400-600	1.300-1.800
Pot life at 22°C [min.]*		10 - 30	10 - 25	5 - 30	15 - 50	5 - 70	5 - 50	2 - 50	2 - 45	5 - 50	2 - 45	2 - 50	5 - 40	5 - 40	10 - 60	10 - 45	10 - 35	15 - 40
Density of the resin at 22°C [g/cm³]		0,91-0,93	1,29-1,31	1,06-1,09	0,98-1,02	1,03-1,06	1,28-1,31	1,75-1,79	1,62-1,65	1,55-1,58	1,56-1,60	1,56-1,59	1,58-1,65	1,23-1,25	1,70-1,78	1,39-1,42	1,53-1,57	1,53-1,56
Density of the hardener at 22°C [g/cm³]		1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24
Shore-hardness A/D	ISO 868, DIN 53505	70 - 78 /--	56 - 64 /--	75 - 80 /--	-- / 45 - 50	45 - 50 /--	-- / 38 - 42	-- / 65 - 75	-- / 45 - 50	-- / 30 - 40	-- / 65 - 70	-- / 65 - 70	-- / 55 - 60	70 - 75 /--	75 - 85 /--	-- / 72 - 78	-- / 85 - 90	85-90/35-40
Temperature range of use		-60°C - 120°C	-60°C - 125°C	-60°C - 125°C	-20°C - 120°C	-40°C - 130°C	-40°C - 130°C	-50°C - 165°C	-50°C - 165°C	-40°C - 130°C	-40°C - 130°C	-25°C - 130°C	-25°C - 130°C	-40°C - 125°C	-40°C - 135°C	-40°C - 140°C	-40°C - 145°C	-40°C - 135°C
Tensile strength [N/mm²]	ISO 527-2	9	1	9	10	1	7	9	9	7	6	6	9	6		12	54	7
Elongation at break	ISO 527-2	210%	61%	210%	80%	48%	88%	40%	40%	20%	62%	60%	35%	100%		137%	2%	80%
Thermal conductivity [W/m·K]	ISO 22007-2:2008	0,22	0,4	0,3	0,2	0,2	0,4	0,6	0,75	0,8	0,61	0,46	0,66	0,3	0,86	0,36	0,55	0,57
Glas transition temperature [°C]	TMA	-60 °C	-60 °C	-60 °C	28 °C	-51 °C	-4 °C	-4 °C	-6 °C	-4 °C	15 °C	8 °C	9 °C	-30 °C	-31 °C	30 °C	85°C	-20 °C
Water absorption	30 days, 22°C	0,2%	0,2%	0,5%	0,4%	4,1%	0,3%	0,7%	0,6%	0,3%	0,4%	0,4%	0,3%	2%	1,3%	1%	0,3%	1,3%
Flammability	UL 94	HB, 3mm	V-0, 6mm**	HB	HB	HB	V-2, 1,5 mm**	HB	V-0, 1,6 mm**	V-0, 4 mm**	V-0, 1,5 mm**	HB	V-0, 3 mm**	HB	V-0, 6 mm**	HB	V-0, 6 mm**	V-0, 6 mm**
Dielectric strength [kV/mm]	IEC 60243-1 VDE 0303, TI.2	25	20	23	24	19	32	30	30	20	29	28	28	22	27	31	34	27
Volume resistance [Ω·cm]	IEC 60093 VDE 030, TI.30	4,2 ·10 <sup>14</sup>	3 ·10 <sup>11</sup>	4 ·10 <sup>14</sup>	10 <sup>14</sup>	7,1 ·10 <sup>10</sup>	6,7 ·10 <sup>14</sup>	1,9 ·10 <sup>14</sup>	1,9 ·10 <sup>14</sup>	10 <sup>13</sup>	5 ·10 <sup>13</sup>	10 <sup>14</sup>	10 <sup>13</sup>	6,7 ·10 <sup>12</sup>	10 <sup>12</sup>	3 ·10 <sup>14</sup>	7 ·10 <sup>14</sup>	10 <sup>12</sup>
Dielectric constant at 50 Hz, 23°C	IEC 60250 VDE 0303, TI.4	3,1	7,2	3,0	3,4	7,4	5,5	5,7	5,7	6,1	5,6	5,6	5,6	7,5	7,8	5,0	3,7	7,8
Properties		low water absorption, flexible	high flexibility	flexible, good adhesion	low viscosity poly-urethane	flexible, high temp. resistant	univ. applic. PU	thermal class F	thermal class F	low corrosion influence	standard UL-listed resin	univ. applic. PU	univ. applic. PU	good temp. shock performance	flexible, high thermal conductivity (cond.)	good adhesion, high chem. resist.	high heat distortion temp.	good temp. shock performance
Typical applications		1, 3 ,5, 8	1, 2, 3	1, 5, 10	1, 3, 8	1, 2, 3, 5, 7	1, 2, 3, 4	2, 3, 5, 6, 7, 9	2, 3, 5, 6, 7, 9	1, 2, 4, 5	2, 3, 4, 5, 11	1, 5, 11	2, 3, 4, 11	1, 3, 5	1, 3, 5, 7, 10	1, 3, 5, 8, 9	2, 7, 9	1, 3, 5

All application parameter refer to processing at room temperature. All mechanic, thermal and electrical properties refer to complete curing.

\* The indicated range of pot life corresponds with recent standard versions. Adjustment of the pot life is possible.

\*\* UL-certification, File-No E108835

Typical application: 1=sensors, 2=transformers, 3=SMD-circuit boards, 4=capacitors, 5=automotive, 6=Ex-proof applications, 7=high temperature application, 8=diodes, 9=motors, 10=bonding, 11=miscellaneous applications in middle voltage range

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