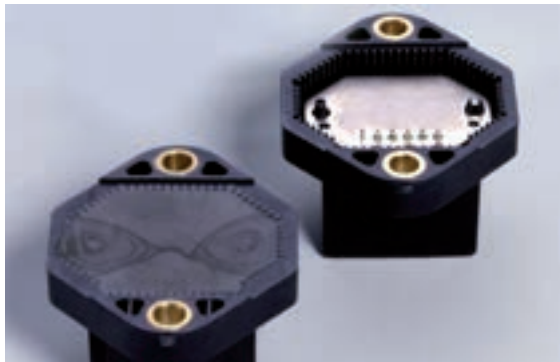


Encapsulation / Potting

For High Performance



Polyurethane and Polybutadiene 2 part systems: BECTRON® PU 45.. and BECTRON® PB 35.. family is comprised of 2 component Polyurethanes covering a clear, high transparency resin and several filled resins. A range of viscosity, hardness and thermal resistance characteristics are available with some qualified for UL94 -V0.

Polybutadiene containing resin of the BECTRON® PB 35.. range give additional flexibility which persists at very low temperatures to withstand severe thermal cycling.

Polyurethane 1 part systems: The one component formulation of BECTRON® PK.. is ready to use with no issues of mixing ratio or pot life and offers reliable performance with potentially good environmental properties.

The resin system offers a range of viscosities with rapid heat cure to form a solid with one of 4 different hardness levels.

Silicone 2 part systems: BECTRON® SK75.. Silicones with Cross Linkers SH79.. provide 2 component systems with either addition and condensation chemistry and the advantage of very high thermal resistance in a clear or filled material. They offer a choice of viscosities from transparent gels to filled elastic silicone rubber with high thermal conductivity and UL94 V0. These offer ideal protection for delicate electronic components.

Epoxy 2 part system: BECTRON® EP 55.. family with Hardeners EH59.. form 2-part epoxy systems which cure to form elastic epoxy plastic. BECTRON® EP55.. is a solvent-less resin with fillers and reacts with a modified aliphatic amine. The resin compound cures with low volume shrinkage and heat evolution to give a stress-free resin. The high elasticity ensures very favourable temperature cycling between -40 °C and +125 °C.

BECTRON® Encapsulation / Potting Resin

BECTRON® Encapsulation / Potting resins when cured display high elasticity and strength producing excellent temperature cycling behaviour within the range of -50 °C to +200 °C as well as resistance to vibrations. This ensures no crazing even in thick layered applications. Furthermore all have good adhesion to almost all materials used in electronics.

- Zero VOC / 100 % solids
- Resistant to temperature cycling from -50 to +200 °C / 20.000 h
- Low glass transition temperature
- Vibration damping, high elasticity
- No exotherm during curing
- Minimal shrinkage

BECTRON® PU-Series 2 Component Polyurethanes, filled

Product Code	Viscosity [mPas]	UL 94	Max Temp. [°C/20.000 h]	Hardness [Shore]	Pot Life [mins]	Cure [h] @ +25 °C	Cure [min] @ +90 °C	Thermal Conductivity [W/mK]
PU 4512	900	No	+110 °C	70 A	40	24	60	0.15
PU 4513	750	No	+115 °C	75 A	50	24	75	0.36
PU 4515	4,500	No	+150 °C	80 A	15	8	30	0.15
PU 4516	310	No	+125 °C	50 D	55	16	60	0.20
PU 4519	2,500	No	+125 °C	75 A	50	24	75	0.36
PU 4520	750	No	+125 °C	75 A	55	24	75	0.36
PU 4522	1,800	V0	+125 °C	85 A	20	8	30	0.48
PU 4526	1,900	V0	+130 °C	55 D	25	14	50	0.45
PU 4527	11,000	No	+125 °C	40 D	10	36	90	0.58
PU 4537	1,600	V0	+130 °C	64 D	30	24	120	0.74
PU 4539	4,000	V0	+130 °C	56 A	40	24	40	0.70

BECTRON® SK-Series 2 Component Silicones, filled

Product Code	Viscosity [mPas]	UL 94	Max Temp. [°C/20.000 h]	Hardness [Shore]	Pot Life [mins]	Cure [h] @ +25 °C	Cure [min] @ +90 °C	Thermal Conductivity [W/mK]
SK 7501/SH 7931	3,800	V0	+200 °C	68 A	20	24	–	0.37
SK 7502/SH 7931	2,650	HB	+180 °C	50 A	45	24	–	0.30
SK 7505/SH 7931 N	7,500	V0	+200 °C	75 A	20	6	–	0.42
SK 7563/SH 7962	3,500	V0	+180 °C	55 A	30	4	–	0.30
SK 7566/SH 7964/6	4,700	V0	+180 °C	25 A	60	4	–	0.55
SK 7567/SH 7965	1,100	V0	+180 °C	25 A	60	4	–	0.30
SK 7568/SH 7967	12,750	V0	+180 °C	< 2	60	48	60	1.08
SK 7569/SH 7968	4,250	V0	+200 °C	50 A	60	24	120	0.60
SK 7570/SH 7969	67,000	V0	+200 °C	40 A	85	24	30	0.15
SK 7571/SH 7970	2,000	V0	+200 °C	40 A	60	24	–	0.45
SK 7572/SH 7971	3,200	V0	+200 °C	40 A	60	24	–	0.52

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