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# SELECTOR GUIDE

## STYCAST™ ENCAPSULANTS

ELECTRONIC, ELECTRICAL, SEALANTS & MECHANICAL

Product	Composition	Viscosity at 25°C (Pa.s) Typical Value	Density (g/cm <sup>3</sup> ) Typical Value	Recommended Cure Schedule(s)	Hardness Typical Value	Thermal Conductivity (W/m.K) Typical Value
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### Epoxy Encapsulants

STYCAST™ W 67	2 K	0,25	1,2	2 hours @ 120°C + 16 hours @ 180°C	85 D	0,2
STYCAST E 151-13	1 K	1,5	1,0	2 hours @ 120°C or 15 minutes @ 160°C	55 D	0,3
STYCAST A 316	1 K	38	1,4	1 hour @ 100°C or 5 minutes @ 160°C	88 D	0,5
STYCAST G 508-1	1 K	27	1,5	2 hours @ 120°C or 30 minutes @ 160°C	89 D	0,6
STYCAST T 640	2 K	3	1,1	12 hours @ RT or 4 hours @ 80°C	85 D	0,2
STYCAST 1090	2 K (Cat. 9)	40	0,8	24 hours @ RT or 2 hours @ 65°C	80 D	0,2
STYCAST 1200 J	2 K	0,6	1,1	2 hours @ 120°C	90 D	0,2
STYCAST 2057	2 K (Cat. 24 LV)	2	1,5	16 hours @ RT or 2 hours @ 65°C	85 D	0,4
STYCAST E 2502	1 K	20	1,7	2 hours @ 150°C	90 D	0,6
STYCAST E 2517	1 K	20	1,7	1 hour @ 150°C	92 D	0,5
STYCAST E 2527 FR	1 K	17	1,5	1 hour @ 120°C	86 D	0,7
STYCAST 2651 MM	2 K (Cat. 9)	14	1,6	24 hours @ RT or 2 hours @ 65°C	88 D	0,6
STYCAST 2651-40 W 1	2 K (Cat. 27-1)	5 <sup>(2)</sup>	1,5	2 hours @ 120°C	92 D	0,5 <sup>(2)</sup>
STYCAST 2850 FT	2 K (Cat. 27-1)	80 <sup>(2)</sup>	2,3 <sup>(2)</sup>	2 hours @ 120°C	94 D	1,1

### Polyurethane Encapsulants

STYCAST U 2500	2 K	6	1,4	24 hours @ RT or 4 hours @ 60°C	75 A	0,6
STYCAST TU 2512	2 K	20	1,9	24 hours @ RT or 4 hours @ 60°C	85 A	1,1
STYCAST U 2516 HTR	2 K	8	1,4	24 hours @ RT or 4 hours @ 60°C	75 A	0,6

### Silicone Encapsulants

STYCAST 4952	2 K (Cat. 50)	35	2,2	24 hours @ RT or 4 hours @ 65°C	70 A	1,0
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<sup>(1)</sup> 1 kHz

<sup>(2)</sup> Preliminary

Dielectric Constant @ 1 MHz Typical Value	Dielectric Strength (kV/mm) Typical Value	Service Temperature	Features
3,3	17,8	-40 to +230°C	High temperature resistant, low viscosity, epoxy impregnant.
3,5	12,8	-40 to +130°C	Semi-flexible, one part encapsulant with excellent thermal shock performance and impact resistance.
-	-	-40 to +155°C	One part epoxy sealant providing exceptional thermal stability and chemical resistance.
-	-	-20 to +180°C	One part, flame retardant encapsulant with low CTE and excellent chemical resistance to heat, water, freon and other solvents.
-	-	-40 to +105°C	Low viscosity, two component encapsulant useful in biomedical applications.
2,7	14,8	-40 to +130°C	Low density syntactic foam.
3,0	15,6	-65 to +150°C	High temperature, transparent, low viscosity epoxy casting resin and impregnant well suited for optical applications.
4,5	15,6	-65 to +105°C	Two part encapsulant designed for easy and rapid air release in casting applications. Flame retardant version available.
3,6	-	-40 to +180°C	One component encapsulant with low CTE and high glass transition temperature (Tg).
4,1 <sup>(1)</sup>	-	-65 to +200°C	One component, low stress, high Tg epoxy encapsulant.
4,1	-	-40 to +180°C	One component, fire retardant (haloegen-free) class H encapsulant.
3,7	17,6	-40 to +130°C	Two part, low viscosity, low abrasion encapsulant with superior machinability.
3,8 <sup>(2)</sup>	17,7 <sup>(2)</sup>	-40 to +175°C	Two component, low viscosity, general purpose epoxy encapsulant.
5,2	21,7 <sup>(2)</sup>	-40 to +175°C	Two part encapsulant providing high heat dissipation ; flame retardant version available.
5,5	15,0	-40 to +130°C	Tough, flexible urethane encapsulant with good abrasion resistance.
-	-	-40 to +130°C	Thermally conductive, flame retardant, polyurethane casting resin.
6,3	-	-40 to +150°C	Flexible polyurethane encapsulant with high service temperature.
5,2	21,6	-65 to +260°C	Thermally conductive, RTV silicone encapsulant.