

## Material Properties

項目/樹脂名	TSR-890 NEW	TSR-884B NEW	TSR-883	TSR-880	TSR-839	TSR-832	TSR-831	TSR-829	TSR-821	TSR-510	HS-696	HS-690	HS-680
Base Material	Epxy	Epxy	Epxy	Epxy	Epxy	Epxy	Epxy	Epxy	Epxy	Silicone	Epxy	Epxy	Epxy
Viscosity(mPa.s) 25℃	300	600	520	372	220	340	420	210	380	9000	360	690	420
Specific Gravity 25℃	1.11	1.10	1.12	1.13	1.07	1.11	1.10	1.07	1.12	1.08	1.15	1.15	1.15
Ec(mJ/cm <sup>2</sup> )	33	24	18	22	25	17	18	19	20-25	136	-	-	-
Dp(mm)	0.21	0.21	0.18	0.22	0.21	0.16	0.17	0.19	0.15	0.36	0.18	0.16	0.2
Tensile strength(MPa)	43	51(50)	60	53	26	51	39	44	49	1.7	64	65	80
Elongation at break(%)	12	3-12(4.4)	5-8	9	19	8	14	8	13-15	130	6-7	5-6	3
Tensile Modulus(MPa)	2,120	2,370(2,090)	2,730	1,850	1,380	2,000	1,600	1,670	1,800	1.1	2,300	2,200	2,380
Flexural Strength(MPa)	66	87(79)	98	78	47	80	62	68	70	-	84	80	100
Flexural Modulus(MPa)	1,710	2,260(2,080)	2,710	2,350	1,430	2,300	1,650	1,840	2,225	-	2,500	2,450	3,200
Izot Impact Strength (J/m , notched)	47	30(25)	37	46	52	31	49	34	48-49	-	51	47	25
HDT@1.81Mpa(℃)	45	53(100)	54	48	44	52	45	49	49-52	-	52-57	55-61	56(100)
HDT@0.46Mpa(℃)	49	58(117)	59	52	49	59	48	53	55-56	-	-	-	-
Hardness (ShoreD)	D81	D87(D86)	D84	D80-82	D79	D84	D80	D83	D80-82	A50	D83-86	D82-85	D85-87
Appearance/Feature	Light blue & transparent	Light blue & transparent	Light yellow & transparent	Light white	High-transparent	Light yellow & transparent	Light white	High-transparent	Light white	transparent	Light yellow	Light yellow	Light yellow
Base Material	Epxy	Epxy	Epxy	Epxy	Epxy	Epxy	Epxy	Epxy	Epxy	Silicone	Epxy	Epxy	Epxy

- ( ) shows a value of thermal post cured
- It is a representative value, not a default value.
- Values may change without notice.