

## Properties

### SER91

Flame-retardant ABS resin (UL94 V-0)

Heat resistance, UV stability

Properties	Test methods	Test conditions	Units	
Melt mass-flow rate	ISO 1133	220 deg C/10kg	g/10min	20
Mold shrinkage	Daicel method	-	%	0.4-0.6
Tensile strength	ISO 527	-	MPa	45
Flexural strength	ISO 178	-	MPa	70
Flexural modulus	ISO 178	-	MPa	2300
Notched Charpy impact strength	ISO 179/1eA	23 deg C	kJ/m <sup>2</sup>	11
Notched Charpy impact strength	ISO 179/1eA	-30 deg C	kJ/m <sup>2</sup>	6
Notched Izod impact strength	ASTM D256	23 deg C/6.4mm	J/m	130
Notched Izod impact strength	ASTM D256	-30 deg C/6.4mm	J/m	70
Rockwell hardness	ISO 2039	-	-	R110
Deflection temperature under load	ISO 75	1.80MPa	deg C	78
Deflection temperature under load	ASTM D648	1.82MPa/12.7mm	deg C	90
Vicat softening temperature	ISO 306/B50	50N X 50deg C/h	deg C	92
Ball pressure temperature	-	-	deg C	85
Coefficient of linear thermal expansion	ISO 11359	MD	X1E-5/deg C	8
Coefficient of linear thermal expansion	ISO 11359	TD	X1E-5/deg C	-
Flammability	UL94	-	-	V-2/0.75mm V-0/1.5mm 5VA/2.5mm
Dielectric strength	ASTM D149	1.5mm	MV/m	25
Arc resistance	ASTM D495	3.0mm	sec(PLC)	36(7)
Water absorption	ISO 62	-	%	0.3
Density	ISO 1183	-	g/cm <sup>3</sup>	1.21

Note

- Values are typical, not quality assured.
- UL recognition File No. of Daicel Polymer is E47773.

### Typical settings for processing

Preliminary drying	Barrel temperature(deg C)				Screw rotation (rpm)	Back pressure (MPa)	Mold temperature (deg C)
	Nozzle	Front	Middle	Back			
3-4hrs 70-80deg C	220-230	220-230	200-210	180-190	40-60	5-15	40-60