

## Acrylonitrile Butadiene Styrene (ABS) Resin

### Characteristics

- Medium high impact
- Injection molding
- High flow for process
- UL 1/16" V-0

### Applications

- Business machine
- Computer
- Complex shaped product
- Battery

Properties	Test	Test Condition	SI unit	
			Unit	s.p.
<b>Rheological Properties</b>				
Specific Gravity	ISO 1183	23°C	g/cm <sup>3</sup>	1.17
Melt Volume Rate	ISO 1133	220°C, 10kg load	cm <sup>3</sup> /10min	38
<b>Mechanical Properties</b>				
Izod Impact Strength	ISO 180/1A	23°C, Notched	KJ/m <sup>2</sup>	17
Charpy impact strength	ISO 179/1A	23°C, Notched	KJ/m <sup>2</sup>	18
Tensile Strength at Yield	ISO 527	23°C, 50 mm/min	MPa	41
Tensile Strength at Break	ISO 527	23°C, 50 mm/min	MPa	29
Elongation at Break	ISO 527	23°C, 50 mm/min	%	30
Flexural Yield	ISO 178	23°C, 2.0 mm/min	MPa	57
Flexural Modulus	ISO 178	23°C, 2.0 mm/min	GPa	1.7
<b>Thermal Properties</b>				
Heat Distortion Temperature	ISO 75	unannealing 1.8MPa	°C	77
Vicat Softening Temperature	ISO 306	50°C/hr, 1 kg load	°C	93
<b>Physical Properties</b>				
Rockwell Hardness	ISO 2039-2	23°C, R-scale	R-scale	97
Mold Shrinkage	ISO 294-4	60x60x2mm S <sub>Flow</sub>	%	≤ 0.4
Moisture Absorption Equilibrium	ISO 62	23°C/50% RH	wt %	≤ 0.3
<b>Flammability</b>				
	UL-94	1/16 inch	No E50263	1/16"V-0 1/8"5VA
<b>Electrical</b>				
Relative Temperature Index	UL-746B	0.062 inch above	°C	60
Hot Wire Ignition	UL-746A	0.062 inch above	Secs	57
High Current Arc Ignition	UL-746A	0.062 inch above	Arcs	10
Arc Tracking Rate	UL-746A	0.062 inch above	in/min	4.2

Note : The data listed represent average values and are believed to be reliable. They are given for information; no guarantee of their accuracy is made.