

Technical Data Sheet

**FR ABS(Flame retardant Acrylonitrile Butadiene Styrene)
HFA 451**

Features High Flame retardant
Applications OA instrument, Electronics

Physical	Test Method	Value
Density	ASTM D792	1.18 g/cm ³
Melt Flow Index (200°C, 21.6kg)	ASTM D1238	120 g/10min
Mold Shrinkage	ASTM D955	0.4 ~ 0.7 %
Water absorption	ASTM D570	0.3 %

Mechanical	Test Method	Value
Tensile Strength	ASTM D638	400 kg/cm ² (5,690) (psi)
Elongation	ASTM D638	15 %
Flexural Strength	ASTM D790	600 kg/cm ² (8,530) (psi)
Flexural Modulus	ASTM D790	23,000 kg/cm ² (327,000) (psi)
Izod Impact Strength(3.2mm)	ASTM D256	20 kgcm/cm (3.7) (ft-lb/in)
Rockwell Hardness(R scale)	ASTM D785	100

Thermal	Test Method	Value
Heat Deflection Temperature(18.6kgf/cm ²)	ASTM D648	76 °C (169) (°F)
Vicat Softening Temperature(1kg, 50°C/h)	ASTM D1525	91 °C (196) (°F)

Flammability	Test Method	Value
Flame Rating - UL (1.5mm)	UL 94	V-0
Flame Rating - UL (2.1mm, 3.0mm)	UL 94	V-0, 5VB