

Technical Data Sheet (ASTM)

ABS(Acrylonitrile Butadiene Styrene)

ABS 745

Features Super impact resistance
Applications Helmets, Suitcase

Physical	Test Method	Value
Density	ASTM D792	1.04 g/cm ³
Melt Flow Index (220°C, 10kg)	ASTM D1238	10 g/10min
Melt Flow Index (200°C, 21.6kg)	ASTM D1238	18 g/10min
Mold Shrinkage	ASTM D955	0.5 ~ 0.8 %
Water absorption	ASTM D570	- %
Mechanical	Test Method	Value
Tensile Strength	ASTM D638	420 kgf/cm ² (5,880) (psi)
Elongation	ASTM D638	25 %
Flexural Strength	ASTM D790	580 kgf/cm ² (8,120) (psi)
Flexural Modulus	ASTM D790	20,000 kgf/cm ² (284,000) (psi)
Izod Impact Strength(3.2mm, 23°C)	ASTM D256	45 kgf-cm/cm (8.3) (ft-lb/in)
Izod Impact Strength(6.4mm, 23°C)	ASTM D256	35 kgf-cm/cm (6.4) (ft-lb/in)
Rockwell Hardness(R scale)	ASTM D785	98
Thermal	Test Method	Value
Heat Deflection Temperature(18.6kgf/cm ²)	ASTM D648	84 °C (183) (°F)
Vicat Softening Temperature(5kg, 50°C/h)	ASTM D1525	94 °C (201) (°F)
Flammability	Test Method	Value
Flame Rating - UL (1.6mm)	UL 94	HB

Notes

These are just typical properties, not specifications. Users should confirm results by their own test.