

Technical Data Sheet

Product Name: ABS N45

Manufacturer: Ghaed Basir Petrochemical Co.

Grade: N45

Type: Acrylonitrile Butadiene Styrene (ABS) – Injection Molding

General Properties

Property	Typical Value	Unit	Test Method
Appearance	Natural (Ivory)	—	Visual
Melt Flow Index (220°C/10kg)	8 – 12	g/10 min	ASTM D1238
Density	1.04	g/cm ³	ASTM D792
Vicat Softening Temperature	98 – 102	°C	ASTM D1525
Rockwell Hardness (R-scale)	105	—	ASTM D785

Mechanical Properties

Property	Typical Value	Unit	Test Method
Tensile Strength at Yield	42 – 45	MPa	ASTM D638
Elongation at Break	> 20	%	ASTM D638
Flexural Strength	65 – 75	MPa	ASTM D790
Flexural Modulus	2000 – 2200	MPa	ASTM D790
Izod Impact Strength (Notched)	180 – 250	J/m	ASTM D256

Thermal Properties

Property	Typical Value	Unit	Test Method
Heat Deflection Temp (1.8 MPa)	85 – 95	°C	ASTM D648

Applications:

- Automotive parts
- Household appliances
- Consumer electronics