



COMPOUND: 27-1840

POLYMER: Polyamide (PA)

DESCRIPTION: Unreinforced Nylon 11, Natural. Injection molded Stock Shapes and Machined parts,

Property	Test Method	Typical Values	Units
Specific Gravity	ISO 1183 / ASTM D792	1.03	-
Hardness	ASTM D785	108	ROCKWELL R
Tensile Strength at Yield	ISO 527 / ASTM D638	5,95 (41.0)	PSI (MPa)
Elongation @ Yield @ Break	ISO 527 / ASTM D638	5.00 > 10	%
Tensile Modulus	ISO 527 / ASTM D638	186,000 (1,280)	PSI (MPa)
Flexural Strength	ASTM D790	7,500 (52.0)	PSI (MPa)
Flexural Modulus	ASTM D790	200,000 (1,379.0)	PSI (MPa)
Izod Impact Strength Notched Unnotched	ASTM D256	1.80 (96) No Break	FT.LB/INCH (J/m)
Heat Deflection Temperature @ 264 PSI (1.82 MPa)	ASTM D648	130 (54.4)	°F (°C)
Mold Shrinkage 1/8" (3.2 mm) Section		0.013 – 0.018	INCH/INCH

GENERAL PROCESSING CONDITIONS FOR INJECTION MOLDING

Injection Pressure – 10,000 – 15,000 (68.95 – 103.42 PSI (MPa))

Melt Temperature – 435 – 550 (221.1 – 287.8) °F (°C)

Mold Temperature – 100 – 150 (37.8 – 65.6) °F (°C)

Drying – 4 Hours at 175 (79) °F (°C)

Moisture Content – 0.2%

Dew Point – 0 (-18) °F (°C)

REVISION HISTORY

REV. NONE – Initial Release, 1-17-2020 RSK

REV. A – Updated data sheet format on new template. Added additional test and processing data. 10-16-2020 RSK