

AS160N

HOMOPOLYMER

FOR MULTIFILAMENTS & STAPLE FIBER

Repol AS160N is PP homopolymer grade recommended for multifilament yarn and staple fiber. It has excellent processability for production of high tenacity multifilament yarn.

BIS Designation Code: IS 10951-1-LB-C

Typical Characteristics

Property	Test Method	Unit	Typical Value*
Melt Flow Rate (230°C/2.16 kg)	ASTM D1238	g/10 min	16
Density	ASTM D792	g/cc.	0.90
Tensile Strength at Yield (50 mm/min.)	ASTM D638	MPa	37
Elongation at Yield (50 mm/min.)	ASTM D638	%	11
Flexural Modulus (1% Secant)	ASTM D790A	MPa	1500
Notched Izod Impact Strength (23 °C.)	ASTM D256	J/m	25
Heat Deflection Temperature (455 KPa)	ASTM D648	°C	105
Hardness – Shore D	ASTM D2240	---	70

* Typical values, not to be taken as specification. All the mechanical properties as per ASTM D638 injection molded Type 1 specimen in accordance with ASTM D4101

Typical Processing Conditions

Extrusion Temperature: 210 – 260 °C
 Quenching Temperature: 10 – 20 °C
 Godet rolls Temperature: 80 – 120 °C
 Draw Ratio: ~ 3.2
 Texturizing Temperature: 125 – 165°C

Note: Processing parameters mentioned above are for reference only and not to be considered as specifications. They may vary based on the product to be manufactured.

Applications

Multifilament yarn, staple fiber etc.

Regulatory Information

The product complies with Indian Standard IS 10910 on “Specification for polypropylene and its copolymers for safe use in contact with foodstuffs, pharmaceuticals and drinking water. It also conforms to IS 16738:2018 on positive list of constituents for polypropylene, polyethylene and their copolymers for its safe use in contact with foodstuffs and pharmaceuticals. The grade and the additives incorporated in it also comply with FDA:CFR Title 21,177.1520, Olefin polymers.

Not to be used in the manufacture of Single Use Plastic (SUP) items prohibited under PWM Rules, 2016.

Storage Recommendations

Bags should be stored in dry / closed conditions at temperatures below 50°C and protected from UV / direct sunlight