

Technical Data

Product Description

1102K is a Polypropylene Homo-polymer resin for extrusion process with the characteristic of good stiffness and good impact. It is suitable for mono-filament and yarn, too. It also meets the F.D.A. requirement in the code of federal regulations in 21 CFR 177.1520 for food contact.

General

Material Status	• Commercial: Active		
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a>		
UL Yellow Card <sup>2</sup>	• <a href="#">E132283-222095</a>		
Search for UL Yellow Card	• <a href="#">IRPC Public Company Limited</a>		
Availability	• Asia Pacific	• Europe	• North America
Features	• Food Contact Acceptable • Good Impact Resistance	• Good Stiffness • Homopolymer	
Uses	• Bags • Industrial Applications • Monofilaments	• Rope • Sheet • Tape	• Yarn
Agency Ratings	• FDA 21 CFR 177.1520		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Extrusion		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	5370 psi	37.0 MPa	ASTM D638
Tensile Elongation (Yield)	27 %	27 %	ASTM D638
Flexural Modulus - 1% Secant	232000 psi	1600 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.1 ft·lb/in <sup>2</sup>	4.5 kJ/m <sup>2</sup>	DIN 53453
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	107	107	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	230 °F	110 °C	ASTM D648
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	392 to 536 °F	200 to 280 °C	

Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

