



TechResin® 1011

Impact Copolymer for Compounding and Injection Molded Applications

TechResin® 1011 is a high impact copolymer of polypropylene designed for such applications as Automotive Compounds and injection molding of Lawn & Garden products and Appliances. It is characterized by its easy mold flow, excellent physical property balance of stiffness and impact at room temperature and sub ambient conditions as well as finished product dimensional stability.

TechResin® 1011 meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles and components of articles intended for direct food contact.

This material is free of animal-derived content.

Typical Properties of this Commercial Grade

		Typical Values				
Property	Test Method	Enş	English		SI	
Melt Flow Rate, I ₂ @ 230°C	ASTM D1238	10	g/10 min	10	g/10 min	
Density	ASTM D1505	0.9	g/cm ³	0.9	g/cm ³	
Tensile Strength at Yield (50 mm/min)	ASTM D638	2,950	psi	20	MPa	
Elongation at Yield (50 mm/min)	ASTM D638	6	%	6	%	
Flexural Modulus (1.3 mm/min), 1% Secant	ASTM D790	140,000	psi	965	MPa	
Notched Izod Impact Strength @ 73°F	ASTM D256A	11	ft-lb/in	587	J/m	
Notched Izod Impact Strength @ 0°F	ASTM D256A	1.9	ft-lb/in	101	J/m	
Notched Izod Impact Strength @ -22°F	ASTM D256A	1.7	ft-lb/in	91	J/m	
Rockwell Hardness	ASTM D785	95	R Scale	95	R Scale	
Heat Deflection Temperature @ 66 psi	ASTM D648	187	°F	86	°C	
Heat Deflection Temperature @ 264 psi	ASTM D648	122	°F	50	°C	

Notes: Specimens were injection molded according to the conditions specified in ASTM D4101. Data for representative purposes only; not to be construed as product specification. Published 3/99, Revised 3/10

MDT does not guarantee reproduction of these results. This is not a Certificate of Analysis and the customer is responsible for testing and confirming the Material Properties before making commercial use of the product to ensure that the product is fit for the intended application and that the product can be used, and any waste material disposed of, safely, properly, and legally based on the customer's or other's circumstances. Determination of the suitability and fitness of the product for any particular application is the sole responsibility of the purchaser of the product. This information is solely intended for informational purposes. This material confirmation relates solely to the product listed above and not as incorporated in any product or used in any process. Material Difference Technology makes no warranty or representation of any kind, regarding the information given or the products described, and expressly disclaims all implied warranties and conditions of quality, merchanitbility and suitability or fitness for a particular purpose. the customer or other user of the product assumes all risk and liability arising out of the use of the product, whether used alone or in combination with other materials. The presence absence or lack of information herein with respect to any particular international, national, federal state or local law, statute, regulation, order or rule should not be construed to mean that product is regulated under, complies with or is exempt from such international, national, federal state or local law, statute, regulation, order or rule