

TechResin® 8060

Product Description

TechResin® 8060 is a narrow molecular weight distribution homopolymer that exhibits enhanced flow characteristics and good balance of stiffness and impact resistance. Typical applications include cases, tote bins, crates and trays and open-head pails.

Status	Commercial: Active
Availability	North America
Application	Crates; Pallets/Trays/Tote Bins
Market	Rigid Packaging
Processing Method	Injection Molding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	7.9	g/10 min	7.9	g/10 min	ASTM D1238
Density, (23 °C)	0.960	g/cm ³	0.960	g/cm ³	ASTM D1505
Bulk Density	37-39	lb/ft ³	593-625	kg/m ³	ASTM D1895
Spiral Flow	8.6	in	21.8	cm	LYB Method
Mechanical					
Flexural Modulus					
(1% Secant)	190000	psi	1310	MPa	ASTM D790
(2% Secant)	155000	psi	1070	MPa	ASTM D790
Flexural Young's Modulus	205000	psi	1410	MPa	ASTM D790
Tensile Modulus, (1% Secant)	123000	psi	848	MPa	ASTM D638
Tensile Young's Modulus	146000	psi	1010	MPa	ASTM D638
Tensile Stress at Break, (23 °C)	2300	psi	15.9	MPa	ASTM D638
Tensile Stress at Yield, (23 °C)	4250	psi	29.3	MPa	ASTM D638
Tensile Elongation at Break, (23 °C)	380	%	380	%	ASTM D638
Tensile Elongation at Yield, (23 °C)	11	%	11	%	ASTM D638
Impact					
Notched Izod Impact Strength, (23 °C)	1.4	ft-lb/in	75	J/m	ASTM D256
Unnotched Impact Strength, (-18 °C)	No Break		No Break		ASTM D4812
Hardness					
Shore Hardness, (Shore D, max)	70		70		ASTM D2240
Thermal					
Vicat Softening Temperature	264	°F	129	°C	ASTM D1525
Low Temperature Brittleness, F ₅₀	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	176	°F	80	°C	ASTM D648
Melting Temperature	270.9	°F	132.7	°C	ASTM D3418
Crystallization Temperature	240.6	°F	115.9	°C	ASTM D3418

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, merchantability 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.