

TechResin® 5502

Description:

TechResin® 5502 is a high density polyethylene copolymer developed for blow molding applications. This product is suitable for applications that require a good Environmental Stress Cracking Resistance (ESCR).

Applications:

containers for household products, Containers for chemical industry (HIC), Containers for pharmaceutical industry, Containers for cosmetic industry

Processes:

Extrusion Blow Molding

Control Properties

Feature	Method	Units	Values
Melt Flow Rate (190°C/2.16kg)	ASTM D 1238	g/10 min	0.350
Density	ASTM D 792	g/cm ³	0.953

Typical Properties¹

Feature	Method	Units	Values
Tensile Strength at Yield	ASTM D 638	MPa	25
Tensile Strength at Break	ASTM D 638	MPa	20
Strain at Yield	ASTM D 638	%	6
Strain at Break	ASTM D 638	%	515
Elasticity Modulus (Secant 1%)	ASTM D 638	MPa	1250
Flexural Modulus (Secant 1%)	ASTM D 790	MPa	1300
Izod Impact Strength ³	ASTM D 256/A	J/m	110
Heat Deflection Temperature (0.455 MPa)	ASTM D 648	°C	70
Vicat Softening Point (10 N)	ASTM D 1525	°C	127
ESCR (10% Igepal) ²	ASTM D 1693	h	7
ESCR (100% Igepal) ²	ASTM D 1693	h	18
FNCT	ISO 16670	min	100

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