

TechResin[®] B5502

High Density Polyethylene (HDPE) Resin Designed for Blow Molding Applications

TechResin[®] B5502 is designed for applications requiring excellent stiffness and stress crack resistance properties. It may be used as a general-purpose blow molding resin or sheet extrusion thermoforming resin.

TechResin[®] B5502 meets all requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles intended for direct food contact.

Suggested Applications:

Pharmaceutical Packaging
Bleach and Detergents

Personal Care Products
Industrial Chemicals & Parts

Nominal Physical Properties:

PROPERTY*	ASTM TEST METHOD	ENGLISH		SI	
		Unit	Value	Unit	Value
Density	D1505	g/cc	0.955	g/cc	0.955
Melt Index, Condition E, 190°C/2.16 kg	D1238	g/10 min.	0.35	g/10 min.	0.35
Environmental Stress Crack Resistance (ESCR) Condition B, F ₅₀ (100% Igepal)	D1693	h	35	h	35
Tensile Yield Strength, 2" (50 mm) per min.	D638 Type IV	psi.	4000	MPa	28
Ultimate Elongation, 2" (50 mm) per min.	D638 Type IV	%	>600	%	>600
Brittleness Temperature	D746	°F	<-180	°C	<-118
Flexural Modulus	D790	psi.	200,000	MPa	1378

* Physical properties reported herein were determined on compression molded specimens prepared in accordance with Procedure C of ASTM D1928.

The nominal properties reported herein are typical of the product but do not reflect normal testing variance and therefore should not be used for specification purposes.

Published 6/01/01, Revised 1/04/16