Technical Data Sheet

Hyperzone HY55403

High Density Polyethylene

Product Description

Hyperzone HY55403 is a high density polyethylene resin that exhibits excellent processability, outstanding environmental stress crack resistance and stiffness. Typical applications include drums and other large part blowmolding applications.

Status	Commercial: Active
Application	Drums; Industrial Packaging
Market	Rigid Packaging
Processing Method	Extrusion Blow Molding
Attribute	Excellent ESCR (Environmental Stress Cracking Resistance); Excellent Processability

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/21.6 kg)	2.7	g/10 min	2.7	g/10 min	ASTM D1238
Density, (23 °C)	0.954	g/cm³	0.954	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	200000	psi	1380	MPa	ASTM D790
Tensile Strength at Yield	4100	psi	28	MPa	ASTM D638
Environmental Stress Crack Resistance, F_{50} (100% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
FNCT, (4.0 MPa, 2% Arkopal N100, 80 °C)	10	hr	10	hr	ISO 16770
Impact					
Tensile Impact Strength	>640	ft-lb/in²	>1340	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	66		66		ASTM D2240
Thermal					
Vicat Softening Temperature	266	°F	130	°C	ASTM D1525
Deflection Temperature Under Load, (66 psi, Unannealed)	162	°F	72	°C	ASTM D648

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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