Technical Data Sheet

Hyperzone HY54907U

High Density Polyethylene

Product Description

Hyperzone HY54907U is a high density polyethylene resin that exhibits excellent processability, outstanding environmental stress crack resistance and stiffness. Typical applications include intermediate bulk containers (IBC), jerry cans, and heating oil tanks. HY54907U is approved to NSF Standard 61 for Distribution System Components.

Regulatory Status

For regulatory compliance information, see *Hyperzone* HY54907U Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS). To obtain copies of these documents, please contact your LyondellBasell product safety representative.

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

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/21.6 kg)	7.5	g/10 min	7.5	g/10 min	ASTM D1238
Density, (23 °C)	0.949	g/cm³	0.949	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	170000	psi	1170	MPa	ASTM D790
Tensile Strength at Yield	3400	psi	23.4	MPa	ASTM D638
Environmental Stress Crack Resistance, F_{50} (100% Igepal®, Cond B)	>3000	hr	>3000	hr	ASTM D1693
FNCT, (4.0 MPa, 2% Arkopal N100, 80 °C)	1100	hr	1100	hr	ISO 16770
Impact					
Tensile Impact Strength	>600	ft-lb/in²	>1260	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	68		68		ASTM D2240
Thermal					
Vicat Softening Temperature	261	°F	127	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	150	°F	66	°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.

Certifications

Certified as meeting requirements of NSF International, as stated above.

Company Information

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

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