Technical Data Sheet

Hyperzone HY55430SX01

High Density Polyethylene

Product Description

This is a preliminary data sheet.

Hyperzone HY55430SX01 is a high density polyethylene resin that exhibits excellent processability and environmental stress crack resistance. Typical applications include bottles for household chemicals, food products, and personal care products. This resin contains synthetic antistat.

Regulatory Status

For regulatory compliance information, see *Hyperzone* HY55430SX01 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS). To obtain copies of these documents, please contact your LyondellBasell product safety representative.

Status	Developmental
Availability	Asia-Pacific; Europe; North America
Application	Bottles For Consumer Goods
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/2.16 kg)	0.30	g/10 min	0.30	g/10 min	ASTM D1238
Density, (23 °C)	0.954	g/cm³	0.954	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	190000	psi	1310	MPa	ASTM D790
Tensile Strength at Yield	4000	psi	27.6	MPa	ASTM D638
Tensile Elongation at Break	>1000	%	>1000	%	ASTM D638
Environmental Stress Crack Resistance, F_{50} (100% Igepal®, Cond B)	200	hr	200	hr	ASTM D1693
Impact					
Tensile Impact Strength	140	ft-lb/in²	294	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	68		68		ASTM D2240
Thermal					
Vicat Softening Temperature	259	°F	126	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	151	°F	66	°C	ASTM D648