

Alathon® L5840AS

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

ALATHON L 5840AS is a lightweighting resin that exhibits excellent color, low odor and provides processing stability. Typical applications include household chemicals, industrial chemicals, detergent, and motor oil bottles. L 5840AS contains antistat.

General

Material Status	• Commercial: Active	
Literature ¹	• Processing - Mold Shrink (English) • Processing - Polyolefin Injection Molding Guide (English) • Processing - Start-Up Guide (English) • Technical Datasheet (English)	
Search for UL Yellow Card	• LyondellBasell Industries • Alathon®	
Availability	• Asia Pacific • Europe	• North America • South America
Additive	• Antistatic	
Features	• Antistatic • Food Contact Acceptable	• Good Processing Stability • Low to No Odor
Uses	• Bottles	
Agency Ratings	• FDA 21 CFR 177.1520	
Forms	• Pellets	
Processing Method	• Blow Molding	

Physical	Nominal Value Unit	Test Method
Density	0.958 g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.35 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance 50°C, 10% Igepal CO-630, F50	25.0 hr	ASTM D1693
Mechanical	Nominal Value Unit	Test Method
Tensile Strength (Yield)	30.3 MPa	ASTM D638
Tensile Elongation (Break)	> 600 %	ASTM D638
Flexural Modulus	1450 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Tensile Impact Strength	294 kJ/m²	ASTM D1822
Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore D)	68	ASTM D2240
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	81.0 °C	ASTM D648
Brittleness Temperature	< -76.0 °C	ASTM D746
Vicat Softening Temperature	128 °C	ASTM D1525

Additional Information

Elongation at Break, ASTM D638: >600%
Tensile Impact, ASTM D1822: 140 ft-lb/in

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.