Technical Data Sheet

Polyaxis LP 8100-5972G ORANGE

Polyethylene, High Density, Metallocene

Product Description

Polyaxis LP-8100 is a high density polyethylene intended for the rotational molding industry. This stiff yet tough compound was designed for watercraft products.

Regulatory Status

For regulatory compliance information, see *Polyaxis* LP 8100-5972G ORANGE Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Processing Method	Rotomolding
Forms	Pellets; Powder
Appearance	Colors Available
Additive	UV Stabilizer

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	5.8	g/10 min	ASTM D1238
Density - Specific Gravity	0.947	g/cm³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min, Rotational Molded)	22.4	MPa	ASTM D638
Flexural Modulus, (Rotational Molded, 1% Secant)	993	MPa	ASTM D790
Environmental Stress Crack Resistance, (Compression Molded, F50, 10% Igepal)	6.00	hr	ASTM D1693
Tensile Elongation at Break, (51 mm/min, Rotational Molded)	200	%	ASTM D638
Impact			
Impact Strength			
(-40 °C, 3.18 mm, Rotational Molded)	81	J	ARM
(-40 °C, 6.35 mm, Rotational Molded)	>258	J	ARM
Thermal			
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm, Rotational Molded)	40.6	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi), (3.18 mm, Rotational Molded)	70.0	°C	ASTM D648

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/.

© LyondellBasell Industries Holdings, B.V. 2026

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.