



# Polyaxis EXP LP 8100-31G BLACK V2

## LyondellBasell Industries - Metallocene High Density Polyethylene

### General Information

#### 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.

#### General

Additive	• UV Stabilizer
Features	• UV Stabilized
Appearance	• Colors Available
Forms	• Pellets • Powder
Processing Method	• Rotational Molding

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.949		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	5.8	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 10% Igepal, Compression Molded, F50	6.00	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield, Rotational Molded)	3250	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Break, Rotational Molded)	200	%	ASTM D638
Flexural Modulus - 1% Secant (Rotational Molded)	144000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Impact Strength			ARM
-40°F, 0.125 in, Rotational Molded	60	ft·lb	
-40°F, 0.250 in, Rotational Molded	> 190	ft·lb	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.125 in, Rotational Molded	158	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.125 in, Rotational Molded	105	°F	ASTM D648

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min