

Technical Data Sheet

# Network Polymers Hdpe 50 0863

High Density Polyethylene  
 LyondellBasell Industries  
 Engineering Plastics

General		
Features	• Food Contact Acceptable	• High Density
Uses	• Non-specific Food Applications	
Agency Ratings	• ASTM D1248, IV, Class A, Cat. 2 • ASTM D1248, IV, Class A, Cat. 3 • FDA 21 CFR 177.1520	
Forms	• Pellets	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.963 g/cm <sup>3</sup>	0.963 g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) <sup>1</sup> (190°C/2.16 Kg)	8.5 g/10 min	8.5 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	4340 psi	29.9 MPa	ASTM D638
Tensile Elongation (Break)	1000 %	1000 %	ASTM D638
Flexural Modulus <sup>2</sup>	200000 psi	1380 MPa	ASTM D790B

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength	48.0 ft·lb/in <sup>2</sup>	101 kJ/m <sup>2</sup>	ASTM D1822

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-105 °F	-76.1 °C	ASTM D746
Vicat Softening Temperature	381 °F	194 °C	ASTM D1525

**Notes**

<sup>1</sup> Procedure A

<sup>2</sup> Method I (3 point load)

**Notes**

These are typical property values not to be construed as specification limits.