

Technical Data Sheet

Microthene MP652962



High Density Polyethylene

Product Description

Microthene MP652962 is a hexene HDPE powder selected by customers for rotationally molding large tank applications. MP652962 is a UV-stabilized, 35-mesh powder and is also available in pellet form as *Petrothene* GA652962.

Application	Containers; Intermediate Bulk Containers; Tanks, Industrial
Market	Rigid Packaging
Processing Method	Rotomolding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	2.0	g/10 min	2.0	g/10 min	ASTM D1238
Density, (23 °C)	0.942	g/cm ³	0.942	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus					
(1% Secant)	147000	psi	1010	MPa	ASTM D790
(2% Secant)	124000	psi	855	MPa	ASTM D790
Tensile Strength at Yield	3400	psi	23.4	MPa	ASTM D638
Environmental Stress Crack Resistance					
F ₅₀ (10% Igepal®, Cond A)	50	hr	50	hr	ASTM D1693
F ₅₀ (100% Igepal®, Cond A)	400	hr	400	hr	ASTM D1693
Impact					
Low Temperature Impact					
1/8" specimen @ -40 °F	57	ft-lbs	77	J	ARM
1/4" specimen @ -40 °F	160	ft-lbs	215	J	ARM
Thermal					
Deflection Temperature Under Load					
(66 psi, Unannealed)	149	°F	65	°C	ASTM D648
(264 psi, Unannealed)	109	°F	43	°C	ASTM D648

Notes

Tensile properties were run with a crosshead speed of 2 inches/min or 50 mm/min.

Igepal® is a registered trademark of Rhodia.

Low Temperature Impact testing was performed according to the Association of Rotational Molders (ARM) International Test Protocol.

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. 2018

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.