

# Technical Data Sheet

## *Alathon* H6011



High Density Polyethylene

### Product Description

*Alathon* H6011 provides good processing characteristics, good stiffness, and impact resistance. Typical applications include crates and pallets.

### Regulatory Status

For regulatory compliance information, see *Alathon* H6011 [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

<b>Status</b>	Commercial: Active
<b>Availability</b>	North America
<b>Application</b>	Crates; Pallets/Trays/Tote Bins
<b>Market</b>	Rigid Packaging
<b>Processing Method</b>	Injection Molding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
<b>Physical</b>					
Melt Flow Rate, (190 °C/2.16 kg)	12	g/10 min	12	g/10 min	ASTM D1238
Density, (23 °C)	0.960	g/cm <sup>3</sup>	0.960	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>					
Flexural Modulus					
(1% Secant)	205000	psi	1410	MPa	ASTM D790
(2% Secant)	171000	psi	1180	MPa	ASTM D790
Flexural Young's Modulus	231000	psi	1590	MPa	ASTM D790
Tensile Stress at Yield, (23 °C)	4220	psi	29.1	MPa	ASTM D638
Tensile Elongation at Yield, (23 °C)	10	%	10	%	ASTM D638
<b>Impact</b>					
Notched Izod Impact Strength, (23 °C)	0.82	ft-lb/in	42	J/m	ASTM D256
<b>Thermal</b>					
Vicat Softening Temperature	261	°F	127	°C	ASTM D1525
Deflection Temperature Under Load, (66 psi, Unannealed)	167	°F	75	°C	ASTM D648

## Notes

Conditions of Tensile Stress and Elongation values are: 50 mm/min, Type IV specimen.

Conditions of Flexural Modulus values are: 0.5 inches/min or 12.5 mm/min.

Conditions of Tensile Modulus values are: 50 mm/min, Type I Specimen.

Spiral Flow measures the number of inches of flow produced when molten resin is injected into a long, spiral channel (0.0625" insert), at a constant injection pressure of 1000 psi with a melt temperature of 440 °F.

Deflection Temperature Under Load and Low Temperature Brittleness data are for control and development work and are not intended for use in design or predicting performance at elevated or sub-ambient temperatures.

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.