

## Lanxess Durethan® ECO BV 30 H2 900500 Nylon 6, 30% Glass Fiber





**Categories:** [Polymer](#); [Renewable/Recycled Polymer](#); [Thermoplastic](#); [Nylon \(Polyamide PA\)](#); [Nylon 6 \(PA6\)](#); [Nylon 6, 30% Glass Fiber Filled](#)

**Material Notes:** PA 6, 30% glass fibers, injection molding, heat-ageing stabilized, contains 30% pre-consumer recycled material

Information provided by LANXESS.

**Vendors:** No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Specific Gravity	<a href="#">1.36</a> g/cc	<a href="#">1.36</a> g/cc	ISO 1183
Bulk Density	<a href="#">0.700</a> g/cc	<a href="#">0.0253</a> lb/in <sup>3</sup>	ISO 60
Moisture Absorption at Equilibrium	2.1 %	2.1 %	50% RH; ISO 62
Water Absorption at Saturation	7.0 %	7.0 %	ISO 62
Linear Mold Shrinkage, Flow	<a href="#">0.00050 - 0.00030</a> cm/cm	<a href="#">0.00050 - 0.00030</a> in/in	Post-shrinkage, 60x60x2; 120°C; 4 hour; ISO 294-4
	<a href="#">0.0020 - 0.0040</a> cm/cm	<a href="#">0.0020 - 0.0040</a> in/in	60x60x2; 280°C / MT 80°C; 600 bar; ISO 294-4
Linear Mold Shrinkage, Transverse	<a href="#">0.0010 - 0.00030</a> cm/cm	<a href="#">0.0010 - 0.00030</a> in/in	Post-shrinkage, 60x60x2; 120°C; 4 hour; ISO 294-4
	<a href="#">0.0060 - 0.010</a> cm/cm	<a href="#">0.0060 - 0.010</a> in/in	60x60x2; 280°C / MT 80°C; 600 bar; ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	<a href="#">145</a> MPa	<a href="#">21000</a> psi	d.a.m.; ISO 527-1, -2; 5 mm/min
Elongation at Break	3.0 %	3.0 %	d.a.m.; ISO 527-1, -2; 5 mm/min
Tensile Modulus	<a href="#">9.40</a> GPa	<a href="#">1360</a> ksi	d.a.m.; ISO 527-1, -2; 1 mm/min
Flexural Strength	<a href="#">235</a> MPa	<a href="#">34100</a> psi	d.a.m., 2 mm/min; ISO 178-A
	@Strain 3.60 %	@Strain 3.60 %	
Flexural Yield Strength	<a href="#">230</a> MPa	<a href="#">33400</a> psi	d.a.m., 2 mm/min; ISO 178-A
	@Strain 3.50 %	@Strain 3.50 %	
Flexural Modulus	<a href="#">8.90</a> GPa	<a href="#">1290</a> ksi	d.a.m., 2 mm/min; ISO 178-A
Izod Impact, Notched (ISO) 	<= <a href="#">10.0</a> kJ/m <sup>2</sup>	<= <a href="#">4.76</a> ft-lb/in <sup>2</sup>	d.a.m.; ISO 180-1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	<= <a href="#">10.0</a> kJ/m <sup>2</sup>	<= <a href="#">4.76</a> ft-lb/in <sup>2</sup>	d.a.m.; ISO 180-1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Unnotched (ISO) 	<a href="#">50.0</a> kJ/m <sup>2</sup>	<a href="#">23.8</a> ft-lb/in <sup>2</sup>	d.a.m.; ISO 180-1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	<a href="#">55.0</a> kJ/m <sup>2</sup>	<a href="#">26.2</a> ft-lb/in <sup>2</sup>	d.a.m.; ISO 180-1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched 	<a href="#">5.50</a> J/cm <sup>2</sup>	<a href="#">26.2</a> ft-lb/in <sup>2</sup>	d.a.m.; ISO 179-1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	<a href="#">6.50</a> J/cm <sup>2</sup>	<a href="#">30.9</a> ft-lb/in <sup>2</sup>	d.a.m.; ISO 179-1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched 	<= <a href="#">1.00</a> J/cm <sup>2</sup>	<= <a href="#">4.76</a> ft-lb/in <sup>2</sup>	d.a.m.; ISO 179-1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	<= <a href="#">1.00</a> J/cm <sup>2</sup>	<= <a href="#">4.76</a> ft-lb/in <sup>2</sup>	d.a.m.; ISO 179-1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Thermal Properties	Metric	English	Comments
Melting Point	<a href="#">220</a> °C	<a href="#">428</a> °F	10°C/min; ISO 11357-1, -3
Deflection Temperature at 0.46 MPa (66 psi)	<a href="#">215</a> °C	<a href="#">419</a> °F	ISO 75-1, -2
Deflection Temperature at 1.8 MPa (264 psi)	<a href="#">197</a> °C	<a href="#">387</a> °F	ISO 75-1, -2

Processing Properties	Metric	English	Comments
Melt Temperature	<a href="#">270 - 290</a> °C	<a href="#">518 - 554</a> °F	
	<a href="#">280</a> °C	<a href="#">536</a> °F	for test specimens; ISO 294
Mold Temperature	<a href="#">80.0</a> °C	<a href="#">176</a> °F	for test specimens; ISO 294
	<a href="#">80.0 - 120</a> °C	<a href="#">176 - 248</a> °F	
Drying Temperature	<a href="#">80.0</a> °C	<a href="#">176</a> °F	
Dry Time	<a href="#">2 - 6</a> hour	<a href="#">2 - 6</a> hour	
Moisture Content	0.030 - 0.12 %	0.030 - 0.12 %	residual; Karl Fischer Test

### Descriptive Properties

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.