



**RAPREX® R-300**

**Branched Linear Low Density Polyethylene  
For Foam and Extrusion Applications**

RAPREX® R-300 is a linear low density polyethylene based resin that exhibits an excellent balance of melt processability and physical properties due to its unique branched structure. It is a thermoplastic and is recyclable. Because of its high molecular weight and melt strength, RAPREX® R-300 is used in film applications where enhanced puncture and tear resistance is required. Because of its high melt strength, it is also used in the production of low density foams.

Property	Standard	Unit	Value
Melt Flow Index (190°C, 2.16kg)	ASTM D1238	g/10 min	0.24
High Load Melt Flow Index (190°C, 21.6kg)	ASTM D1238	g/10 min	12.7
Density	ASTM D-792	g/cm <sup>3</sup>	0.921
Tensile Strength @ Yield	ASTM D-638		No Yield
Elongation @ Yield	ASTM D-638		No Yield
Tensile Strength @ Break	ASTM D-638	psi (MPa)	2,620 (18.1)
Elongation @ Break	ASTM D-638	%	340
Flexural Modulus A	ASTM D-790	psi (MPa)	42,000 (290)
Izod Notched Impact Strength at Room Temperature (23 °C)	ASTM D-256		No Break
Izod Notched Impact Strength at -40 °C	ASTM D-256		No Break <sub>k</sub>
Brittleness Temperature	ASTM D-746	°C	< -75

The data contained in this document are based upon ASTM methods and procedures and are comprised of typical values that are neither intended to be viewed as nor relied upon as specifications. The customer should independently determine suitability for use. This data sheet is not intended to assure any properties or suitability for any specific purpose and is not intended to relieve processors from the responsibility of carrying out their own tests and experiments. Sterigenics U.S., LLC, its parent, subsidiaries and affiliates ("Sterigenics") make no representation, guaranty or warranty, express or implied. In particular, Sterigenics makes no representation, guarantee or warranty, express or implied, concerning the merchantability or fitness for a particular purpose of any of the products it supplies. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

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