

	ASTM Method <sup>2</sup>	Units	Linear Polyethylene Grades							
Resin Grade			LL 8360 or LLP8360	LL-8555 or LLP8555	LL 8446*	LL 8455 or LLP8455	LL 8450 or LLP8450	LL 8460 or LLP8460	HD 8660 or HDP8660	HD 8760 or HDP8760
<b>Characteristics</b>			<ul style="list-style-type: none"> <li>• Low warpage</li> <li>• Excellent ESCR/impact</li> <li>• Easy to process</li> <li>• UV-8 Stabilized</li> </ul>	<ul style="list-style-type: none"> <li>• Superior processability</li> <li>• Excellent surface finish and color</li> <li>• UV-8 or UV-4</li> </ul>	<ul style="list-style-type: none"> <li>• Excellent processability</li> <li>• Easy grinding</li> <li>• Low warpage</li> <li>• UV-8 Stabilized</li> </ul>	<ul style="list-style-type: none"> <li>• Excellent processability</li> <li>• Easy grinding</li> <li>• Low warpage</li> <li>• UV-4 Stabilized</li> </ul>	<ul style="list-style-type: none"> <li>• Excellent processability</li> <li>• High stiffness</li> <li>• Excellent color</li> <li>• UV-8 Stabilized</li> </ul>	<ul style="list-style-type: none"> <li>• Excellent Balance of Stiffness, Toughness and Processability</li> <li>• UV-8 Stabilized</li> </ul>	<ul style="list-style-type: none"> <li>• Superior stiffness, toughness, creep, and tear properties</li> <li>• UV-8 Stabilized</li> </ul>	<ul style="list-style-type: none"> <li>• Outstanding stiffness and processability</li> <li>• UV-8 Stabilized</li> </ul>
<b>Typical Applications</b>			<ul style="list-style-type: none"> <li>• Externally supported IBCs</li> <li>• Consumer articles</li> </ul>	<ul style="list-style-type: none"> <li>• Display cabinets</li> <li>• Toys/ playground equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Toys</li> <li>• Consumer/ General purpose articles</li> <li>• Tanks</li> </ul>	<ul style="list-style-type: none"> <li>• Toys</li> <li>• Indoor articles</li> </ul>	<ul style="list-style-type: none"> <li>• Playground equipment</li> <li>• Water tanks</li> </ul>	<ul style="list-style-type: none"> <li>• Tanks &amp; IBCs</li> <li>• Playground equipment</li> <li>• Industrial Parts</li> </ul>	<ul style="list-style-type: none"> <li>• Agricultural tanks</li> <li>• IBCs</li> <li>• Industrial Products</li> </ul>	<ul style="list-style-type: none"> <li>• RV Tanks</li> <li>• Consumer articles</li> </ul>
<b>Resin Properties<sup>1</sup></b>										
<b>Density</b>	D-4883	g/cc	0.932	0.936	0.936	0.936	0.937	0.938	0.942	0.948
<b>Melt Index</b>	D-1238	g/10 min	5.2	6.8	5.0	5.5	5.0	3.3	2.0	5.0
<b>Peak Melting Point</b>	D-3418	°C (°F)	125 (257)	126 (259)	125 (257)	125 (257)	127 (261)	127 (261)	129 (264)	131 (268)
<b>Environmental Stress</b>	D-1693, Cond. A	Hr	>1000	275	36	36	>1000	>1000	550	9
<b>Crack Resistance (ESCR), F<sub>60</sub></b>	100% Igepal 10% Igepal	Hr	650	55	24	24	185	145	48	9
<b>Flexural Modulus</b>	D-790 @ 1% secant Procedure B	MPa (kpsi)	600 (87)	702 (102)	730 (106)	702 (102)	730 (106)	771 (112)	888 (129)	1060 (154)
<b>Tensile Strength @ Yield</b>	D-638, Type IV specimen	MPa (psi)	15.1 (2200)	17.2 (2500)	17 (2450)	16 (2325)	17.6 (2550)	17.9 (2575)	20.3 (2950)	23.4 (3400)
<b>Tensile Elongation @ Yield</b>	2"/min @ 1/8" thick	%	20.6	17.5	17	17	16.7	17.7	16.2	15.3
<b>Deflection Temperature</b>	D-648 @ 66 psi @ 264 psi	°C (°F)	55 (131) 37 (98)	59 (138) 38 (100)	52 (126) 36 (97)	57 (135) 38 (101)	61 (142) 38 (100)	62 (144) 39 (102)	67 (153) 41 (106)	74 (166) 43 (110)
<b>Impact Strength @ -40° C</b>	ARM 1/8" (3.17 mm) thickness	J (ft-lbs)	88 (65)	81 (60)	68 (50)	72 (53)	77 (57)	95 (70)	108 (80)	79 (58)
	1/4" (6.35 mm) thickness	J (ft-lbs)	217 (160)	217 (160)	177 (130)	170 (116)	183 (135)	258 (190)	244 (180)	176 (130)

<sup>1</sup> All physical properties were measured on rotomolded samples, except for ESCR, which was measured on compression molded samples.

<sup>2</sup> Test procedures may be modified to accommodate operating conditions or facility limitations.

- All grades formulated with UV stabilization. Some grades also offered without UV stabilization. Consult your sales or technical representative for details.
- All grades comply with FDA and HPB regulatory standards for food contact. Restrictions may apply. Contact your sales or technical representative for details.
- All grades are recognized by the Underwriters Laboratories (UL) for flammability standard 94HB.
- All grades are listed by the National Sanitation Foundation (NSF) for standards 51 and 61.

\* Only available in Europe – can in principle be used in food contact applications in various EU member states. See datasheets for ISO test values.

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Find Us Online  
[www.easternreliability.com](http://www.easternreliability.com)

Contact Us  
Email: [sales@easternreliability.com](mailto:sales@easternreliability.com)  
Phone: (508) 992-9189

Massachusetts Location  
176 Samuel Barnet Boulevard  
New Bedford, MA 02745

New York Location  
113 Twin Oaks Drive  
Syracuse, NY 13206