

Technical Data Sheet

Diamaloy Engineered Alloys 808 C8 WW

Polycarbonate Alloy
LyondellBasell Industries
Engineering Plastics

General	
Agency Ratings	<ul style="list-style-type: none"> • EC 1907/2006 (REACH) • EU 2002/96/EC (WEEE) • FDA 21 CFR 174.105 • FDA 21 CFR 175.105(b)(3)(viii) • FDA 21 CFR 176.170(c), Table 2, Cond. C • FDA 21 CFR 176.170(c), Table 2, Cond. D • FDA 21 CFR 176.170(c), Table 2, Cond. E • FDA 21 CFR 176.170(c), Table 2, Cond. F • FDA 21 CFR 176.170(c), Table 2, Cond. G • FDA 21 CFR 177.1580
RoHS Compliance	• RoHS Compliant
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.22	1.22 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (200°C/5.0 Kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Water Absorption			ASTM D570
24 Hr, 73°F (23°C)	0.15 %	0.15 %	
Equilibrium, 73°F (23°C)	0.35 %	0.35 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	8950 psi	61.7 MPa	ASTM D638
Tensile Elongation (Break)	100 %	100 %	ASTM D638
Flexural Modulus - Tangent ³	340000 psi	2340 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.125 In (3.18 Mm)	1.8 ft·lb/in	96 J/m	
Unnotched Izod Impact			ASTM D4812
73°F (23°C), 0.125 In (3.18 Mm)	No Break	No Break	
Gardner Impact			ASTM D5420
-20°F (-29°C)	> 320 in·lb	> 36.2 J	
0°F (-18°C)	> 320 in·lb	> 36.2 J	
73°F (23°C)	> 320 in·lb	> 36.2 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm)	217 °F	103 °C	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance	90.0 %	90.0 %	ASTM D1003
Haze	1.00 %	1.00 %	ASTM D1003

Notes

¹ Procedure A

² 2.0 in/min (51 mm/min)

³ 0.050 in/min (1.3 mm/min)

Notes

These are typical property values not to be construed as specification limits.