

General Information

Product Description

Centrex 810® is a high flow, high gloss, medium impact grade ASA (Acrylonitrile-Styrene-Acrylate) resin. It is an injection molding grade with a good balance of physical properties, gloss and processing performance, along with good resistance to weather aging. As with any product, use of Centrex 810 must be tested (including field testing, etc.) in advance by the user to determine suitability.

General

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| Material Status | • Commercial: Active |
| Availability | • North America |
| Test Standards Available | • ASTM |
| Features | • Flow, High • Impact Resistance, Medium
• Gloss, High • Weather Resistance, Good |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

ASTM and ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density -Specific Gravity	1.06	sp gr 23/23°C	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	21	g/10 min	ASTM D1238
Mold Shrink, Linear-Flow (Injection Molded)	0.0050 to 0.0060	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (Injection Molded)	357000	psi	ASTM D638
Tensile Strength @ Yield (Injection Molded)	5900	psi	ASTM D638
Flexural Modulus (Injection Molded)	347000	psi	ASTM D790
Flexural Strength (Injection Molded)	10200	psi	ASTM D790
Impact	Nominal Value	Unit	Test

Notched Izod Impact			Method ASTM D256
(-22 °F, 0.125 in, Injection Molded)	1.00	ft·lb/in	
(32 °F, 0.125 in, Injection Molded)	1.20	ft·lb/in	
(73 °F, 0.125 in, Injection Molded)	1.60	ft·lb/in	
Instrumented Dart Impact			ASTM D3763
(-22 °F, Injection Molded)	Total Energy: 88.5	in·lb	
(32 °F, Injection Molded)	Total Energy: 354	in·lb	
(73 °F, Injection Molded)	Total Energy: 398	in·lb	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	100		ASTM D785
Thermal	Nominal Value	Unit	Test Method
DTUL @66psi - Unannealed			ASTM D648
(0.125 in, Injection Molded)	183	°F	
(0.250 in, Injection Molded)	194	°F	
DTUL @264psi - Unannealed			ASTM D648
(0.125 in, Injection Molded)	165	°F	
(0.250 in, Injection Molded)	176	°F	
Vicat Softening Point			ASTM D1525
(120°C/hr, Loading 1 (10 N))	219	°F	
(50°C/hr, Loading 2 (50 N))	199	°F	
Processing Information			
Injection	Nominal Value		Unit
Drying Temperature	180 to 190		°F
Drying Time	2.0		hr
Suggested Max Moisture	0.10		%
Rear Temperature	460 to 520		°F
Middle Temperature	460 to 520		°F
Front Temperature	460 to 520		°F
Nozzle Temperature	460 to 520		°F
Processing (Melt) Temp	460 to 520		°F

Mold Temperature	110 to 180	°F
Injection Rate	Moderate	
Injection Notes		
Inlet Air Dew Point:	-20°F	

Notes

¹Typical properties: these are not to be construed as specifications.

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