

ALLEN® 8300FR

High Impact, Fire Rated PC/ABS, High Gloss Sheet

Introduction

ALLEN® 8300FR is a polycarbonate and ABS blend with high impact properties, stiffness, heat resistance, and a non-halogenated flame retardant V-0 @0.060", 5VA @0.118" rating.

General Information

ALLEN® 8300FR has been tested under laboratory conditions and has achieved a UL94 V-0 rating at 0.060 in (1.52mm) and above and meets the requirements of Federal Motor Vehicle Safety Standard No. 302 (FMVSS 302).

Suggested Applications

- Medical Equipment Housings
- Electrical Housings and Covers
- Vehicle Interior Trim Parts
- Battery Charging Station

Features

- Flame retardant
- Halogen free
- Low smoke toxicity
- High heat deflection temperature
- Increased stiffness
- Edge trim easily used into future orders
- High gloss finish

Environmental and Safety Considerations

SEKISUI SPI is committed to ensuring that its products can be manufactured, transported, stored, used, disposed, and recycled with an appropriate regard for safety, health, and environmental protection. We support the safe handling of our products. Please contact our Technical Service department at 800.682.8758 for resources or visit our website: <http://www.sekisui-spi.com>. For Safety Data Sheets, please call 800.325.3133.

SEKISUI SPI

Customer Service

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Physical Properties

Property	Test Method	Typical Value ¹	
PHYSICAL			
Specific Gravity	ASTM D792	1.21	
Water Absorption, 24hr	ASTM D570	0.14 %	
Rockwell Hardness, R-Scale	ASTM D785	119	
MECHANICAL			
Tensile Strength	ASTM D638	9,440 psi	65.1 MPa
Tensile Modulus	ASTM D638	381,000 psi	2626.9 MPa
Flexural Modulus	ASTM D790	381,000 psi	2626.9 MPa
Flexural Stress at 5% Strain	ASTM D790	14,600 psi	100.7 MPa
Compressive Strength, yield	ASTM D695	11,700 psi	80.7 MPa
Shear Strength	ASTM D732	8,980 psi	61.9 MPa
Bearing Strength, 4% deflection	ASTM D953	4,280 psi	29.5 MPa
Bearing Strength, max.	ASTM D953	42,500 psi	293.0 MPa
Notched Izod Impact Resistance	ASTM D256	12 ft-lbs/in	640.8 J/m
Gardner Drop Dart Impact, GE	ASTM D5420	605 in-lbf	68.4 J
THERMAL			
Heat Deflection Temperature (HDT) @264 psi (1.8 MPa), unannealed	ASTM D648	228.0 °F	109 °C
Heat Deflection Temperature (HDT) @66 psi (0.45 MPa), unannealed	ASTM D648	233.4 °F	112 °C
Coefficient of Thermal Expansion (MD)	ASTM E831	37.8 µin/in/°F	68 µm/m/°C
ELECTRICAL			
Dielectric Strength, oil	ASTM D149	425 V/mil	16.7 kV/mm
FLAMMABILITY			
Underwriters Laboratories, Inc. [®] Component Recognition	UL Standard 94 ²	V-0 @ 0.060 in (1.52mm)	
Motor Vehicle Safety Standard	FMVSS 302	PASS	
¹ Values based upon 0.125" (3.17mm) sheet unless otherwise specified. ² ALLEN® 8300FR has been tested under laboratory conditions and has passed UL 94 V-0 criteria. SEKISUI SPI makes no warranty or guarantee that these products will meet UL 94 V-0 in the parts final, finished configuration. Not intended for specification purposes.			

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This information supersedes all previously published data.