

ALLEN® 4225F

FDA Grade, High Impact ABS, High Gloss Sheet

Introduction

ALLEN® 4225F is a general purpose ABS that has high impact strength and a good cost to performance ratio to other materials like stainless steel, and other thermoplastics.

General Information

ALLEN® 4225F has been tested under laboratory conditions and has achieved a UL94 HB rating at 0.060 in (1.52mm) and above and meets the requirements of Federal Motor Vehicle Safety Standard No. 302 (FMVSS 302) and US Food And Drug Administration 21 CFR 181.32 (Acrylonitrile copolymers and resins).

Suggested Applications

- Mechanical covers & housings
- Beverages dispensers
- Ice bins
- Food equipment

Features

- Custom color matching
- Good forming properties
- Edge trim easily used in future orders
- High gloss, high impact
- Excellent low temperature performance
- FDA 21 CFR 181.32 compliant

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	1.06	
Water Absorption, 24 hr	ASTM D570	0.28%	
Rockwell Hardness, R-Scale	ASTM D785	98	
MECHANICAL			
Tensile Strength	ASTM D638	5,330 psi	36.7 MPa
Tensile Modulus	ASTM D638	293,000 psi	2020.2 MPa
Flexural Modulus	ASTM D790	307,000 psi	2116.7 MPa
Flexural Stress at 5% Strain	ASTM D790	8,920 psi	61.5 MPa
Compressive Strength	ASTM D695	7,190 psi	49.6 MPa
Shear Strength	ASTM D732	5,810 psi	40.1 MPa
Bearing Strength, 4% deflection	ASTM D953	4,040 psi	180.6 MPa
Bearing Strength, max.	ASTM D953	26,200 psi	358.8 J/m
Notched Izod Impact	ASTM D256	6.72 ft-lb/in	432 J/m
Gardner Drop Dart Impact, GE	ASTM D5420	301 in-lbf	34.0 J
THERMAL			
Heat Deflection Temperature (HDT) @264 psi (1.8 MPa), annealed	ASTM D648	211.7 °F	99.9 °C
Heat Deflection Temperature (HDT) @66 psi (0.45 MPa), annealed	ASTM D648	219.1 °F	104 °C
Coefficient of Thermal Expansion (MD)	ASTM E831	50.1 µin/in/°F	90.1 µm/m/°C
ELECTRICAL			
Dielectric Strength, oil	ASTM D149	442 V/mil	17.4 kV/mm
FLAMMABILITY			
Underwriters Laboratories, Inc. [®] Component Recognition	UL Standard 94 ²	HB @ 0.060 in (1.52mm)	
Motor Vehicle Safety Standard	FMVSS 302	PASS	

¹ Values based upon injection molded resin.

² ALLEN® 4225F has been tested under laboratory conditions and has passed UL 94HB criteria. SEKISUI SPI makes no warranty or guarantee that these products will meet UL 94HB in the parts final, finished configuration.
Not intended for specification purposes.

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This information supersedes all previously published data.