

ACRYLITE® Sheet 249

Polymethyl Methacrylate Acrylic
Evonik Cyro LLC

Message:

ACRYLITE® 249 acrylic sheet meets and is certified to MIL-P-8184F (Type II, Class 2). ACRYLITE® 249 is a cross-linked cast acrylic sheet with increased resistance to crazing and solvent attack, as well as improved dimensional stability after heating. This specification requires optical quality cast acrylic sheet that is superior to conventional acrylic sheet. ACRYLITE® 249 sheet is used in a wide variety of aviation and ground vehicle transparencies in monolithic or laminated form.

General Information			
Features	Crazing Resistant		
	Good Thermal Shock Resistance		
	High Clarity		
	Machinable		
	Solvent Resistant		
Uses	Aircraft Applications		
	Automotive Applications		
	Laminates		
Agency Ratings	MIL P-8184 Type II, Class 2		
Appearance	Clear/Transparent		
	Colors Available		
Forms	Sheet		
Processing Method	Thermoforming		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.19	g/cm ³	ASTM D792
Water Absorption (24 hr)	0.13	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	80.3	MPa	ASTM D638
Tensile Elongation (Yield)	4.4	%	ASTM D638
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	112	°C	ASTM D648
CLTE - Flow	5.6E-5	cm/cm/°C	ASTM D696
Flammability	Nominal Value	Unit	Test Method
Burning Rate (12.7 mm)	21	mm/min	ASTM D635
Optical	Nominal Value	Unit	Test Method
Transmittance			
-- 1	92.5	%	ASTM D1003

-- ²	92.6	%	Internal Method
Haze			
-- ³	0.70	%	ASTM D1003
-- ⁴	0.30	%	Internal Method
Additional Information	Nominal Value	Unit	
Craze Resistance ⁵			
Dry: Isopropanol	21.7	MPa	
Dry: Toluene/Isobutyl Acetate	14.5	MPa	
Wet: Isopropanol	15.9	MPa	
Wet: Toluene/Isobutyl Acetate	11.1	MPa	
Internal Strain ⁶	0.30	%	
NOTE			
1.	After Accelerated Weathering		
2.	Initial (MIL-P-8184F)		
3.	After Accelerated Weathering		
4.	Initial (MIL-P-8184F)		
5.	MIL-P-8184F		
6.	MIL-P-8184F		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

