

PLEXIGLAS® V052i

ACRYLIC RESIN

Typical Properties

	Value	Units	Test method
Physical			
Melt Flow Rate (230°C/3.8 kg)	3.0	g/10 min	ASTM D1238
Specific Gravity	1.18	—	ASTM D792
Mold Shrinkage	0.2 - 0.6	%	ASTM D955
Water Absorption (24 hr immersion)	0.4	% weight gain	ASTM D570
Mechanical			
Tensile Strength @ Maximum	9,200	psi	ASTM D638
Tensile Elongation @ Break	22	%	ASTM D638
Tensile Modulus	410,000	psi	ASTM D638
Flexural Strength @ Maximum	14,000	psi	ASTM D790
Flexural Modulus	420,000	psi	ASTM D790
Notched Izod Impact (73°F)	0.4	ft-lb/in notch	ASTM D256
Rockwell Hardness	84	M-scale	ASTM D785
Thermal			
HDT (0.455 MPa; annealed) ¹	217	°F	ASTM D648
HDT (1.82 MPa; annealed) ¹	207	°F	ASTM D648
Vicat Softening Point (50°C/hr; 10N)	230	°F	ASTM D1525
Vicat Softening Point (50°C/hr; 50N)	216	°F	ASTM D1525
Thermal Conductivity	1.3	BTU/hr*ft ² *F/in	ASTM C177
Flammability	HB	Class	ASTM UL94
Optical			
Refractive Index (N _d @ 72°F)	1.49	—	ASTM D542
Luminous Transmittance (0.125 in/3.2 mm)	91	%	ASTM D1003
Haze (0.125 in/3.2 mm)	<1	%	ASTM D1003
Classification			
ASTM Classification	PMMA 0211V3	—	ASTM D788

Data given are average values and should not be used for specification purposes.

1 Annealing cycle: 4hrs @ 176°F

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement. See SDS for Health & Safety Considerations. Arkema has implemented a Medical Policy regarding the use of Arkema products in Medical Devices applications that are in contact with the body or circulating bodily fluids: (<http://www.arkema.com/en/social-responsibility/responsible-product-management/medical-device-policy/index.html>).

Arkema has designated Medical grades to be used for such Medical Device applications. Products that have not been designated as Medical grades are not authorized by Arkema for use in Medical

Device applications that are in contact with the body or circulating bodily fluids. In addition, Arkema strictly prohibits the use of any Arkema products in Medical Device applications that are implanted in the body or in contact with bodily fluids or tissues for greater than 30 days. The Arkema trademarks and the Arkema name shall not be used in conjunction with customers' medical devices, including without limitation, permanent or temporary implantable devices, and customers shall not represent to anyone else, that Arkema allows, endorses or permits the use of Arkema products in such medical devices. It is the sole responsibility of the manufacturer of the medical device to determine the suitability (including biocompatibility) of all raw materials, products and components, including any medical grade Arkema products, in order to ensure that the final end-use product is safe for its end use; performs or functions as intended; and complies with all applicable legal and regulatory requirements (FDA or other national drug agencies). It is the sole responsibility of the manufacturer of the medical device to conduct all necessary tests and inspections and to evaluate the medical device under actual end-use requirements and to adequately advise and warn purchasers, users, and/or learned intermediaries (such as physicians) of pertinent risks and fulfill any post-market surveillance obligations. Any decision regarding the appropriateness of a particular Arkema material in a particular medical device should be based on the judgment of the manufacturer, seller, the competent authority, and the treating physician.

Altuglas® and Plexiglas® are registered trademarks of Arkema.
©2015 Arkema Inc. All rights reserved.