

Technical Data

Product Description

Acrypet® VH is a Polymethyl Methacrylate Acrylic material. It is available in North America.

Important attributes of Acrypet® VH are:

- Chemical Resistant
- Clarity
- Good Aesthetics
- Good Weather Resistance
- High Hardness

Typical applications include:

- Automotive
- Appliances
- Electrical/Electronic Applications
- Optics/Lenses

General

Material Status	• Commercial: Active
UL Yellow Card ¹	• E54695-244824 • E256044-101328773 • E95683-101677765
Search for UL Yellow Card	• Mitsubishi Rayon America Inc. • Acrypet®
Availability	• North America
Features	• Good Chemical Resistance • High Clarity • Good Weather Resistance • High Hardness • Pleasing Surface Appearance
Uses	• Appliances • Electrical/Electronic Applications • Automotive Applications • Optical Applications
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.19	1.19 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow	2.0E-3 to 6.0E-3 in/in	0.20 to 0.60 %	ASTM D955
Water Absorption (24 hr)	0.30 %	0.30 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ³	10500 psi	72.4 MPa	ASTM D638
Tensile Elongation ³ (Break)	5.0 %	5.0 %	ASTM D638
Flexural Modulus (0.250 in (6.35 mm))	455000 psi	3140 MPa	ASTM D790
Flexural Strength (0.250 in (6.35 mm))	15600 psi	108 MPa	ASTM D790
Compressive Strength	15600 psi	108 MPa	ASTM D695
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.250 in (6.35 mm))	0.31 ft-lb/in	17 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (M-Scale)	100	100	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	216 °F	102 °C	ASTM D648
Vicat Softening Temperature	241 °F	116 °C	ASTM D1525
CLTE - Flow	3.3E-5 in/in/°F	6.0E-5 cm/cm/°C	ASTM D696
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Refractive Index	1.490	1.490	ASTM D542



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Polymethyl Methacrylate Acrylic
Mitsubishi Rayon America Inc.

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Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Transmittance (126 mil (3200 µm))	93.0 %	93.0 %	ASTM D1003

Additional Information

Surface Resistivity, JIS K6911: $>10^{16}$ ohm
Volume Resistivity, JIS K6911: $>10^{15}$ ohm-cm
Dielectric Breakdown Strength: 20 kV/mm
Dielectric Constant, 60Hz: 3.7
Dielectric Loss Tangent, 60Hz: 0.05
Arc Resistance, JIS K6911: No Trace

Notes

¹ A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

² Typical properties: these are not to be construed as specifications.

³ Type I



Acrypet® VH

Polymethyl Methacrylate Acrylic

Mitsubishi Rayon America Inc.

PROSPECTOR®

www.ulprospector.com

Where to Buy

Supplier

Mitsubishi Rayon America Inc.

New York, NY USA

Telephone: 212-223-3043

Web: <http://www.mrany.com/>

Distributor

EnCom, Inc.

Telephone: 866-481-7700

Web: <http://www.encompolymers.com/>

Availability: North America

