

Technical Data

Product Description

ACRYPET™ VH is a Polymethyl Methacrylate Acrylic material. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for compounding extrusion or extrusion.

Important attributes of ACRYPET™ VH are:

- Chemical Resistant
- High Purity
- High Stiffness
- Weather Resistant

Typical applications include:

- Automotive
- Lighting Applications
- Construction Applications
- Decorative Parts
- Housings

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
UL Yellow Card ²	• E54695-244824 • E256044-101328773
Search for UL Yellow Card	• Mitsubishi Chemical Corporation • ACRYPET™
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Chemical Resistant • Clean/High Purity • Good Colorability • Good Weather Resistance • High Light Transmission • High Stiffness • Industrial Resin
Uses	• Automotive Applications • Construction Applications • Displays • Housings • Lighting Applications • Lighting Fixtures
Appearance	• Clear/Transparent • Colors Available
Processing Method	• Compounding Extrusion • Extrusion

Physical	Nominal Value Unit	Test Method
Density	1.19 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	2.0 g/10 min	ISO 1133
Spiral Flow		Internal Method
-- 4	13.0 cm	
-- 5	22.0 cm	
Molding Shrinkage	0.20 to 0.60 %	Internal Method
Water Absorption (24 hr, 23°C)	0.30 %	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	3300 MPa	ISO 527-2/1A/1
Tensile Stress	77.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	6.0 %	ISO 527-2/1A/5
Flexural Modulus	3300 MPa	ISO 178
Flexural Stress	140 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength	1.4 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength	20 kJ/m ²	ISO 179/1eU
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	101	ISO 2039-2



Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature 1.8 MPa, Unannealed	100 °C	ISO 75-2/A
Vicat Softening Temperature	107 °C	ISO 306/B50
CLTE - Flow	6.0E-5 cm/cm/°C	JIS K7197
Specific Heat	1500 J/kg/°C	JIS K7123
Thermal Conductivity	0.20 W/m/K	JIS A1412
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	> 1.0E+16 ohms	JIS K6911
Volume Resistivity	> 1.0E+15 ohms·cm	JIS K6911
Electric Strength ⁶	20 kV/mm	JIS K6911
Dielectric Constant (60 Hz)	3.70	JIS K6911
Dissipation Factor (60 Hz)	0.050	JIS K6911
Optical	Nominal Value Unit	Test Method
Refractive Index ⁷	1.490	ISO 489
Light Transmittance (Total, 3000 µm)	93.0 %	ISO 13468
Haze (3000 µm)	0.300 %	ISO 14782

Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² 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.
- ³ Typical properties: these are not to be construed as specifications.
- ⁴ Melt Temperature: 230°C
- ⁵ Melt Temperature: 250°C
- ⁶ 4000 V/sec
- ⁷ nD



Where to Buy

Supplier

Mitsubishi Chemical Corporation
Tokyo, Japan
Telephone: +81-3-6748-7300
Web: <https://www.m-chemical.co.jp/en/index.html>

Distributor

Please contact the supplier to find a distributor for ACRYPET™ VH

