

XANTAR® 27 R

Polycarbonate
Mitsubishi Engineering-Plastics Corp

Message:
Very High Viscosity, Molding Release

General Information	
UL YellowCard	E340159-100746615
Additive	Mold Release
Features	Good Mold Release
	Ultra High Viscosity
RoHS Compliance	RoHS Compliant
Forms	Pellets
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1)
	Secant Modulus vs. Strain (ISO 11403-1)
	Specific Volume vs Temperature (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	3.00	cm³/10min	ISO 1133
Molding Shrinkage - Flow	0.60	%	ISO 294-4
Water Absorption (Saturation, 23°C)	0.35	%	ISO 62
Limiting Viscosity Number	61.0	cm³/g	ISO 1628-4
Thermal Conductivity of Melt	0.24	W/m/K	

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	70		ISO 2039-2

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2300	MPa	ISO 527-2
Tensile Stress (Yield)	60.0	MPa	ISO 527-2
Tensile Strain (Yield)	6.0	%	ISO 527-2
Nominal Tensile Strain at Break	> 50	%	ISO 527-2
Flexural Modulus	2400	MPa	ISO 178
Flexural Stress	90.0	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (23°C)	80	kJ/m²	ISO 180/4A

Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	130	°C	ISO 75-2/A
Vicat Softening Temperature	150	°C	ISO 306/B50

Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
CLTE - Flow	6.5E-5	cm/cm/°C	ISO 11359-2
RTI Elec			UL 746
1.50 mm	130	°C	
3.00 mm	130	°C	
RTI Imp			UL 746
1.50 mm	125	°C	
3.00 mm	130	°C	
RTI Str			UL 746
1.50 mm	125	°C	
3.00 mm	130	°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength	29	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	3.00		
1 MHz	2.90		
Dissipation Factor			IEC 60250
100 Hz	6.6E-4		
1 MHz	9.2E-3		
Comparative Tracking Index (CTI)	PLC 2		UL 746
Comparative Tracking Index	225	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flammability Classification			IEC 60695-11-10, -20
1.50 mm	V-2		
3.00 mm	V-2		
Glow Wire Flammability Index			IEC 60695-2-12
1.50 mm	800	°C	
3.00 mm	960	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
1.50 mm	825	°C	
3.00 mm	875	°C	
Oxygen Index	26	%	ISO 4589-2
Optical	Nominal Value	Unit	Test Method
Transmittance	89.0	%	ASTM D1003

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

