



PRODUCT CAPABILITIES:

Sheet : 10mm & 12mm

ADVANTAGES:

- Resistance Temperature of -100°C to +120°C
- Extreme Impact Strength
- Exhibit High Optical Clarity
- Good Fire Rating
- High Light Transmission

PRODUCT COLORS:

Clear

APPLICATIONS INCLUDE:

- Machine Guards
- Lighting Fixtures
- Signs
- Wall & Door Partitions

Made of MAKROLON®

GENERAL PROPERTIES	TEST METHOD	GP CLEAR 099 Typical Values
PHYSICAL		
Density (kg/m ³)	ISO 1183-1	1,200
Water Absorption Saturation at 23°C (%)	ISO 62	0.30
MECHANICAL		
Tensile Modulus (MPa)	ISO 527-1, -2	2,350
Yield Stress (MPa)	ISO 527-1, -2	>60
Yield Strain (%)	ISO 527-1, -2	6
Strain at break (%)	ISO 527-1, -2	120
Flexural Modulus (MPa)	ISO 178	2,350
Flexural Strength (MPa)	ISO 178	90
Charpy Impact Strength (Unnotched) (kJ/m ²)	ISO 179-1eU	Non-break
Charpy Impact Strength (Notched) (kJ/m ²)	ISO 179-1eA	80P
Izod Impact Strength, 23°C (kJ/m ²)	ISO 180-A	70P
THERMAL		
Vicat Softening temperature (°F / °C)	ISO 306	298 / 148
Thermal Conductivity (W/(mK))	ISO 8302	0.20
Coefficient of Linear Thermal Expansion(10 ⁻⁴ /K)	ISO 11359-1, -2	0.65
Temperature of deflection under load (1.80 Mpa) (°F / °C)	ISO 75-1, -2	262 / 128
Temperature of deflection under load (0.45 Mpa) (°F / °C)	ISO 75-1, -2	284 / 140
ELECTRICAL		
Electric Strength (kV/mm)	IEC 60243-1	34
Volume Resistivity (ohm.m)	IEC 60093	10 ¹⁴
Surface Resistivity (ohm)	IEC 60093	10 ¹⁶
Relative Permittivity (100 Hz/ 1MHz)	IEC 60250	3.1/ 3.0
Dissipation Factor (100 Hz/ 1 MHz)	IEC 60250	5/ 95
Light Transmission (%) (10mm)	DIN 5036	83

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.