



POM C 115x1000 mm traffic red

Article No.	P1005150
Category	POM

Technical Properties

Density & Weight

Property	Value	Unit	Test standard
Density	1.24	g/cm ³	ASTM D792

Moisture Absorption

Property	Value	Unit	Test standard
Water absorption to saturation	2.2	%	ASTM D955
Water Absorption to Saturation	0.5	%	ASTM D570

Tensile Properties

Property	Value	Unit	Test standard
Tensile Strength	51	MPa	DIN EN ISO 527-2
Modulus of elasticity (tensile)	1200	MPa	ASTM D790
Breakdown Voltage	76.5	MPa	ISO 527
Break Elongation	300	%	ASTM D638

Flexural Properties

Property	Value	Unit	Test standard
Flexural Strength	58	MPa	ASTM D638

Impact Resistance

Property	Value	Unit	Test standard
Notched impact strength (Charpy)	6	kJ/m ²	DIN EN ISO 179-1

Property	Value	Unit	Test standard
Impact Resistance (Charpy)	19	kJ/m ²	ISO 179/1eU

Hardness

Property	Value	Unit	Test standard
Hardness Shore D	83	° Shore D	ISO 868
Ball pressure hardness	230	MPa	ISO 2039-1

Temperature Limits

Property	Value	Unit	Test standard
Melting point	222	°C	ISO 3146
Maximal operating temperature (short-term)	129	°C	UL746B
Maximum Operating Temperature	90	°C	
Minimum temperature	-46.25	°C	
Heat deflection temperature (HDT/A)	105	°C	ASTM D648
Heat deflection temperature (HDT/B)	155	°C	ISO 75
Vicat softening temperature (VST/B/50)	50	°C	ISO 306

Thermal Conductivity

Property	Value	Unit	Test standard
Thermal Conductivity	0.3	W/(m·K)	DIN 52612

Thermal Expansion

Property	Value	Unit	Test standard
Thermal Expansion Coefficient	0.4	10 ⁻⁴ /K	ISO 11359

Insulation Properties

Property	Value	Unit	Test standard
Dielectric Strength	85	kV/mm	IEC 60243-1
Volume Resistivity	10 ¹²	Ω	IEC 60093
Dielectric Constant (1 MHz)	3.7	-	IEC 60250
Dielectric loss factor (1 MHz)	0.0	-	IEC 60250
Dielectric loss factor (100 Hz)	0.0	-	IEC 60250

Static spread

Property	Value	Unit	Test standard
Surface Resistivity	10 ¹³	Ω	IEC 60093
Comparative Tracking Index (CTI)	600	V	IEC 60112

Fire Classification

Property	Value	Unit	Test standard
Flammability Classification (UL 94)	60695		UL 94