

Epraform® PMMA G

This material is a cast, crystal clear material that has a wide range of applications in construction, advertising and industry. The mechanical properties and glueability are better than those of extruded acrylate. The material is reasonably impact-resistant, has good scratch resistance and is excellent weather and UV resistant. Deviating and very large sizes can be produced by the casting process. The material is reasonably well chemically resistant.

General properties	Test method	Value	Unit
ISO code:	ISO 1183		
Density:	ISO 1183-1	1,17	g/cm3
Water absorption in Air (23°C / 50% RH)	ISO 62	0,3	%
Water absorption in Air (23°C / 100% RH)	ISO 62	0,3	%
Resistance to hot water	n/a	+	
Weather resistance	n/a	+	
Light transmission	ASTM D1003	92	%
Refractive index	ISO 489	1490	
Mechanical properties			
Elongation at break:	ISO 527	5	%
Ball indentation hardness	ISO 2039	100	MPa
Tensile modules of elasticity	ISO 527	3200	MPa
Charpy impact strength - notched	ISO 179	1,4	kJ/m2
Charpy impact strength - unnotched	ISO 179	12	kJ/m2
Compressive stress at 1%	n/a	n/a	MPa
Coefficient of friction	n/a	0,5	
Thermal properties			
Melting temperature	n/a	180	°C
Max. allowable service temp (short period)	n/a	90	°C
Max. allowable service temp (long period)	n/a	80	°C
Min. service temperature	n/a	-20	°C
Coefficient of linear expansion	n/a	65	x10 ⁻⁶ m/(m*K)
Flammability	UL94	HB	
Electrical properties			
Dielectric dissipation (at 1MHz)	ISO 60250	0,04	Ω
Electric strength	ISO 60243	10	kV/mm
Volume resistivity	ISO 60093	10 ^{^15}	Ω.cm

Date of issue: 4 May 2018

Disclaimer: The content of this document has been composed with the utmost care. However, it is possible that certain information changes over time, becomes inaccurate or in-complete. ERIKS does not guarantee that the information provided on this document is up to date, accurate and complete; the information provided is not intended to be advice. ERIKS shall never be liable for damage resulting from the use of the information provided.