



LEHIGH VALLEY PLASTICS

We Shape The Industry

Ketron® PEEK 30% GF, Polyetheretherketone, 30% glass reinforced, extruded

MECHANICAL PROPERTIES	ENGLISH VALUES	COMMENTS	METRIC VALUES
Specific Gravity	1.51	ASTM D792	1.51
Tensile Strength, psi	14000	ASTM D638	97 MPa
Tensile Modulus, psi	1000000	ASTM D638	6,895 MPa
Elongation, %	2	ASTM D638	2 %
Flexural Strength, psi	23000	ASTM D790	159 MPa
Flexural Modulus, psi	1000000	ASTM D790	6,895 MPa
Shear Strength, psi	14000	ASTM D732	97 MPa
Compressive Strength, psi	22000	ASTM D695, 10% Def.	152 MPa
Compressive Modulus, psi	550000	ASTM D695	3,792 MPa
Hardness, Rockwell M	103	ASTM D785	103
Hardness, Rockwell R	126	ASTM D785	126
Hardness, Durometer, Shore D Scale	89	ASTM D2240	89
Izod Impact (Notched), ft-lb/in	0.8	ASTM D256 Type A	43 J/m
Relative Machinability	7	1-10, 1=Easier to Machine	7
THERMAL PROPERTIES	ENGLISH VALUES	COMMENTS	METRIC VALUES
Coefficient of Thermal Expansion, 10E-4/°F	0.12	ASTM E831 (-40°F to 300°F)	0.22 10 ⁻⁴ /K
Deflection Temperature 264 psi, °F	450	ASTM D648	232 °C
Melting Point (Crystalline) Peak, °F	644	ASTM D3418	340 °C
Continuous Service in Air (Max), °F	480	Long Term	249 °C
Thermal Conductivity, BTU-in/hr-ft ² -°F	2.98	ASTM F433	0.43 W/m-K
ELECTRICAL PROPERTIES	VALUES	COMMENTS	METRIC VALUES
Dielectric Strength, Short Term, Volts/mil	500	ASTM D149	20 kV/mm
Surface Resistance, Ohm/Square	1E+13	Lower Limit; EOS/ESD S11.11	1E+13 Ohm/Square
CHEMICAL PROPERTIES	ENGLISH VALUES	COMMENTS	METRIC VALUES
Water Absorption Immersion, 24 hr., %	0.1	ASTM D570(2)	0.1 %
Water Absorption Immersion Sat, %	0.3	ASTM D570(2)	0.3 %
Acids, Weak (acetic, dilute HCl)	3	Acceptable Service	3
Acids, Strong (conc. HCl or sulfuric)	2	Limited Service	2
Alkalies, Weak (dilute NaOH)	3	Acceptable Service	3
Alkalies, Strong (conc. NaOH)	3	Acceptable Service	3
Hydrocarbons, Aromatic (toluene)	3	Acceptable Service	3
Hydrocarbons, Aliphatic (gasoline)	3	Acceptable Service	3
Ketones, Esters (acetone)	3	Acceptable Service	3
Ethers (diethyl ether, THF)	3	Acceptable Service	3
Chlorinated Solvents (methylene chloride)	3	Acceptable Service	3
Alcohols (methanol, anti-freeze)	3	Acceptable Service	3
Continuous Sunlight	2	Limited Service	2
COMPLIANCE	ENGLISH VALUES	COMMENTS	METRIC VALUES
Flammability, UL94 (5=V-0; 4=V-1; 3=V-2; 1=HB)	5 (V-0)	UL94; 1/8 inch	5
FDA (1=Yes)	0	Not Compliant	0

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