



Technical

Properties of Non-Metallic Solids

Table 2: Properties of Non-Metallic Solids

Material	Density (at or near room temp.) (lb/cu.in.)	Average Specific Heat (BTU/lb/°F)	Thermal Conductivity (at or near room temp.) K(BTU/hr./sq.ft./°F)	Melting Point (°F)
Asbestos	.070	.25±	5.2	—
Asphalt	.076	.40	5.3	—
Brickwork & Masonry	.076	.22	3.7	—
Beeswax	.035	—	—	144
Carbon	.080	.28	165	6700
Cellulose Acetate	.047	.3 to .5	1.2 to 2.3	—
Butyrate	.043	.3 to .4	1.2 to 2.3	—
Delrin	.051	.35	1.6	—
Glass	.101	.161	7.5	—
Graphite	.075	.20	—	—
Lava, Grade A	.085	—	9±	2912
Mica	.102	.21	3.0	—
Magnesium, Compacted	.112	.209	20	—
Nylon	.040	.4	1.5	—
Paper	.034	.45	.62	—
Paraffin	.032	.70	1.6	133
Phenolic (general)	.046	.40	.6 to 1.2	—
Porcelain	.114	.26	—	3326
Polyethylene	.035	.55	2.3	—
Polystyrene	.038	.32	.7 to 1.0	—
Quartz	.080	.21	—	3150
Rubber	.044	.44	1.1	—
Rosin	.380	.5	—	—
Sugar	.073	.30	—	—
Steatite	.094	.20	17.5 to 23	2500±
Sulfur	.075	.175	1.9	246
Teflon	.078	.25	1.7	—
Vinyl	.046	.3 to .5	.8 to 2.0	—
Wood, Oak	.029	.57	1.1	—