

Density ρ

hydrogen	0.0898 kg/m ³	glycerol	1261 kg/m ³
helium	0.179 kg/m ³	concrete	2400 kg/m ³
aerogel	1 kg/m ³	glass	2500 kg/m ³
air	1.2 kg/m ³	granite	2700 kg/m ³
liquid hydrogen	70 kg/m ³	aluminum	2700 kg/m ³
styrofoam	75 kg/m ³	diamond	3500 kg/m ³
cork	240 kg/m ³	titanium	4540 kg/m ³
pine	373 kg/m ³	mild steel	7850 kg/m ³
lithium	535 kg/m ³	brass	8600 kg/m ³
oak	710 kg/m ³	copper	8940 kg/m ³
ice	917 kg/m ³	silver	10500 kg/m ³
cooking oil	920 kg/m ³	lead	11340 kg/m ³
water	1000 kg/m ³	mercury	13546 kg/m ³
nylon	1150 kg/m ³	gold	19320 kg/m ³

Shear modulus μ

Sandstone	0.4 GPa
Rubber	600 kPa
Chalk	3.2 GPa
Wood	4 GPa
Glass	26 GPa
Granite	24 GPa
Limestone	24 GPa
Aluminum	25.5 GPa
Steel	79 GPa
Titanium	41 GPa
Diamond at 4 K	478 GPa

Fluids have no
shear modulus!

Bulk (compressive) modulus k

Air (20°C and 1 atm, isothermal)	101 kPa
PDMS (polydimethylsiloxane, Sylgard 184)	118 to 190 MPa
Sandstone	0.7 GPa
Rubber	1.5 to 2 GPa
Water	2.2 GPa
Chalk	9 GPa
Sodium chloride	24.4 GPa
Glass	35 to 55 GPa
Granite	50 GPa
Limestone	65 GPa
Aluminum	69 GPa
Steel	160 GPa
Titanium	111 to 135 GPa
Diamond at 4 K	443 GPa

Young's modulus E_y

Rubber	10 to 100 MPa	Beryllium	287 GPa
Low-density polyethylene	110 to 860 MPa	Molybdenum	330 GPa
PTFE (Teflon)	500 MPa	Tungsten	400 to 410 GPa
High-density polyethylene	800 MPa	Silicon carbide	450 GPa
Polycarbonate	2 to 2.4 GPa	Tungsten carbide	450 to 650 GPa
Human cortical bone	14 GPa	Carbon nanotube	>1000 GPa
High-strength concrete	30 GPa	Graphene	1050 GPa
Glass	50 to 90 GPa	Diamond	1050 to 1210 GPa
Aluminum	69 GPa		
Tooth enamel	83 GPa		
Bronze	96 to 120 GPa		
Brass	100 to 125 GPa		
Titanium alloys	105 to 120 GPa		
Steel (ASTM-A36)	200 GPa		

Poisson's ratio ν

Rubber	0.4999
Gold	0.42 to 0.44
Magnesium	0.252 to 0.289
Titanium	0.265 to 0.34
Copper	0.33
Aluminum	0.32
Stainless steel	0.3 to 0.31
Mild steel	0.27 to 0.30
Concrete	0.1 to 0.2
Glass	0.18 to 0.3
Metallic glasses	0.276 to 0.409
foam	0.1 to 0.5
Cork	0