

Table 1-86. DENSITY OF VARIOUS SOLIDS*

Approximate Density of Solids at Ordinary Atmospheric Temperature

In the case of substances with voids, such as paper or leather, the bulk density is indicated rather than the density of the solid portion.

Substance	Grams per cu cm	Pounds per cu ft	Substance	Grams per cu cm	Pounds per cu ft	Substance	Grams per cu cm	Pounds per cu ft
Agate	2.5-2.7	156-168	Glass			Tallow		
Alabaster			Common	2.4-2.8	150-175	Beef	0.94	59
Carbonate	2.69-2.78	168-173	Flint	2.9-5.9	180-370	Mutton	0.94	59
Sulfate	2.26-2.32	141-145	Glue	1.27	79	Tar	1.02	66
Albite	2.62-2.65	163-165	Granite	2.64-2.76	165-172	Topaz	3.5-3.6	219-223
Amber	1.06-1.11	66-69	Graphite†	2.30-2.72	144-170	Tourmaline	3.0-3.2	190-200
Amphiboles	2.9-3.2	180-200	Gum arabic	1.3-1.4	81-87	Wax, sealing	1.8	112
Anorthite	2.74-2.76	171-172	Gypsum	2.31-2.33	144-145	Wood (seasoned)		
Asbestos	2.0-2.8	125-175	Hematite	4.9-5.3	306-330	Alder	0.42-0.68	26-42
Asbestos slate	1.8	112	Hornblende	3.0	187	Apple	0.66-0.84	41-52
Asphalt	1.1-1.5	69-94	Ice	0.917	57.2	Ash	0.65-0.85	40-53
Basalt	2.4-3.1	150-190	Ivory	1.83-1.92	114-120	Balsa	0.11-0.14	7-9
Beeswax	0.96-0.97	60-61	Leather, dry	0.86	54	Bamboo	0.31-0.40	19-25
Beryl	2.69-2.7	168-169	Lime, slaked	1.3-1.4	81-87	Basswood	0.32-0.59	20-37
Biotite	2.7-3.1	170-190	Limestone	2.68-2.76	167-171	Beech	0.70-0.90	32-56
Bone	1.7-2.0	106-125	Linoleum	1.18	74	Birch	0.51-0.77	32-48
Brick	1.4-2.2	87-137	Magnetite	4.9-5.2	306-324	Blue gum	1.00	62
Butter	0.86-0.87	53-54	Malachite	3.7-4.1	231-256	Box	0.95-1.16	59-72
Calamine	4.1-4.5	255-280	Marble	2.6-2.84	160-177	Butternut	0.38	24
Calcspar	2.6-2.8	162-175	Meerschaum	0.99-1.28	62-80	Cedar	0.49-0.57	30-35
Camphor	0.99	62	Mica	2.6-3.2	165-200	Cherry	0.70-0.90	43-56
Caoutchouc	0.92-0.99	57-62	Muscovite	2.76-3.00	172-187	Dogwood	0.76	47
Cardboard	0.69	43	Ochre	3.5	218	Ebony	1.11-1.33	69-83
Celluloid	1.4	87	Opal	2.2	137	Elm	0.54-0.60	34-37
Cement, set	2.7-3.0	170-190	Paper	0.7-1.15	44-72	Hickory	0.60-0.93	37-58
Chalk	1.9-2.8	118-175	Paraffin	0.87-0.91	54-57	Holly	0.76	47
Charcoal			Peat blocks	0.8	52	Juniper	0.56	35
Oak	0.57	35	Pitch	1.07	67	Larch	0.50-0.56	31-35
Pine	0.28-0.44	18-28	Porcelain	2.3-2.5	143-156	Lignum vitae	1.17-1.33	73-83
Cinnabar	8.12	507	Porphyry	2.6-2.9	162-181	Locust	0.67-0.71	42-44
Clay	1.8-2.6	112-162	Pressed wood			Logwood	0.91	57
Coal			pulp board	0.19	12	Mahogany		
Anthracite	1.4-1.8	87-112	Pyrite	4.95-5.1	309-318	Honduras	0.66	41
Bituminous	1.2-1.5	75-94	Quartz	2.65	165	Spanish	0.85	53
Cocoa butter	0.89-0.91	56-57	Resin	1.07	67	Maple	0.62-0.75	39-47
Coke	1.0-1.7	62-105	Rock salt	2.18	136	Oak	0.60-0.90	37-56
Copal	1.04-1.14	65-71	Rubber, hard	1.19	74	Pear	0.61-0.73	38-45
Cork	0.22-0.26	14-16	Rubber, soft			Pine		
Cork linoleum	0.54	34	Commercial	1.1	69	Pitch	0.83-0.85	52-53
Corundum	3.9-4.0	245-250	Pure gum	0.91-0.93	57-58	White	0.35-0.50	22-31
Diamond	3.01-3.52	188-220	Sandstone	2.14-2.36	134-147	Yellow	0.37-0.60	23-37
Dolomite	2.84	177	Serpentine	2.50-2.65	156-165	Plum	0.66-0.78	41-49
Ebonite	1.15	72	Silica			Poplar	0.35-0.5	22-31
Emery	4.0	250	Fused trans-			Satinwood	0.95	59
Epidote	3.25-3.50	203-218	parent	2.21	138	Spruce	0.48-0.70	30-44
Feldspar	2.55-2.75	159-172	Translucent	2.07	129	Sycamore	0.40-0.60	24-37
Flint	2.63	164	Slag	2.0-3.9	125-240	Teak		
Fluorite	3.18	198	Slate	2.6-3.3	162-205	Indian	0.66-0.88	41-55
Galena	7.3-7.6	460-470	Soapstone	2.6-2.8	162-175	African	0.98	61
Gamboge	1.2	75	Spermaceti	0.95	59	Walnut	0.64-0.70	40-43
Garnet	3.15-4.3	197-268	Starch	1.53	95	Water gum	1.00	62
Gas carbon	1.88	117	Sugar	1.59	99	Willow	0.40-0.60	24-37
Gelatin	1.27	79	Talc	2.7-2.8	168-174			

†Some values reported as low as 1.6

*Based largely on: "Smithsonian Physical Tables", 9th rev. ed., W.E. Forsythe, Ed., The Smithsonian Institution, 1956, p. 292.