

Material - powder, ore, solids, etc.	kg/cu.m.
Alfalfa, ground	256
Alum, lumpy	881
Alum, pulverized	753
Alumina	961
Aluminum, oxide	1522
Ammonia gas	0.77
Ammonium Nitrate	730
Ammonium Sulphate - dry	1130
Ammonium Sulphate - wet	1290
Andesite, solid	2771
Antimony, cast	6696
Apples	641
Arsenic	5671
Asbestos - shredded	320- 400
Asbestos rock	1600
Ashes - wet	730- 890
Ashes - dry	570- 650
Asphalt, crushed	721
Babbitt	7272
Bagasse	120
Bakelite, solid	1362
Baking powder	721
Barium	3780

Bark, wood refuse	240
Barley	609
Barite, crushed	2883
Basalt, broken	1954
Basalt, solid	3011
Bauxite, crushed	1281
Beans, castor	577
Beans, cocoa	593
Beans, navy	801
Beans, soy	721
Beeswax	961
Beets	721
Bentonite	593
Bicarbonate of soda	689
Bismuth	9787
Bones, pulverized	881
Borax, fine	849
Bran	256
Brewers grain	432
Brick, common red	1922
Brick, fire clay	2403
Brick, silica	2050
Brick, chrome	2803
Brick, magnesia	2563

Buckwheat	657
Butter	865
Cadmium	8650
Calcium carbide	1201
Caliche	1442
Carbon, solid	2146
Carbon, powdered	80
Carbon dioxide	1.98
Carbon monoxide	1.25
Cardboard	689
Cement - clinker	1290-1540
Cement, Portland	1506
Cement, mortar	2162
Cement, slurry	1442
Chalk, solid	2499
Chalk, lumpy	1442
Chalk, fine	1121
Charcoal	208
Chloroform	1522
Chocolate, powder	641
Chromic acid, flake	1201
Chromium	6856
Chromium ore	2162
Cinders, furnace	913

Cinders, Coal, ash	641
Clay, dry excavated	1089
Clay, wet excavated	1826
Clay, dry lump	1073
Clay, fire	1362
Clay, wet lump	1602
Clay, compacted	1746
Clover seed	769
Coal, Anthracite, solid	1506
Coal, Anthracite, broken	1105
Coal, Bituminous, solid	1346
Coal, Bituminous, broken	833
Cobaltite (cobolt ore)	6295
Coconut, meal	513
Coconut, shredded	352
Coffee, fresh beans	561
Coffee, roast beans	432
Coke	570- 650
Concrete, Asphalt	2243
Concrete, Gravel	2403
Concrete, Limestone with Portland	2371
Copper ore	1940-2590
Copper sulfated, ground	3604
Copra, medium size	529

Copra, meal, ground	641
Copra, expeller cake ground	513
Copra, expeller cake chopped	465
Cork, solid	240
Cork, ground	160
Corn, on the cob	721
Corn, shelled	721
Corn, grits	673
Cottonseed, dry, de-linted	561
Cottonseed, dry, not de-linted	320
Cottonseed, cake, lumpy	673
Cottonseed, hulls	192
Cottonseed, meal	593
Cottonseed, meats	641
Cottonwood	416
Cryolite	1602
Cullet	1602
Culm	753
Dolomite, solid	2899
Dolomite, pulverized	737
Dolomite, lumpy	1522
Earth, loam, dry, excavated	1249
Earth, moist, excavated	1442
Earth, wet, excavated	1602

Earth, dense	2002
Earth, soft loose mud	1730
Earth, packed	1522
Earth, Fullers, raw	673
Emery	4005
Ether	737
Feldspar, solid	2563
Feldspar, pulverized	1233
Fertilizer, acid phosphate	961
Fish, scrap	721
Fish, meal	593
Flaxseed, whole	721
Flint - silica	1390
Flour, wheat	593
Flue dust	1450-2020
Fluorspar, solid	3204
Fluorspar, lumps	1602
Fluorspar, pulverized	1442
Fullers Earth - raw or burnt	570- 730
Galena (lead ore)	7400 - 7600
Garbage, household rubbish	481
Glass - broken or cullet	1290-1940
Glass, window	2579
Glue, animal, flaked	561

Glue, vegetable, powdered	641
Gluten, meal	625
Gneiss, bed in place	2867
Gneiss, broken	1858
Granite, solid	2691
Granite, broken	1650
Graphite, flake	641
Grain - Maize	760
Grain - Barley	600
Grain - Millet	760- 800
Grain - Wheat	780- 800
Gravel, loose, dry	1522
Gravel, with sand, natural	1922
Gravel, dry 1/4 to 2 inch	1682
Gravel, wet 1/4 to 2 inch	2002
Gummite (uranium ore)	3890 - 6400
Gypsum, solid	2787
Gypsum, broken	1290-1600
Gypsum, crushed	1602
Gypsum, pulverized	1121
Halite (salt), solid	2323
Halite (salt), broken	1506
Hematite (iron ore)	5095 - 5205
Hemimorphite (zinc ore)	3395 - 3490

Hydrochloric acid 40%	1201
Ice, solid	919
Ice, crushed	593
Ilmenite	2307
Iridium	22154
Iron ore - crushed - see metals table	2100-2900
Iron oxide pigment	400
Iron Pyrites	2400
Iron sulphate - pickling tank - dry	1200
Iron sulphate - pickling tank - wet	1290
Ivory	1842
Kaolin, green crushed	1025
Kaolin, pulverized	352
Lead, rolled - see metals table	11389
Lead, red	3684
Lead, white pigment	4085
Leather	945
Lignite, dry	801
Lime, quick, lump	849
Lime, quick, fine	1201
Lime, stone, large	2691
Lime, stone, lump	1538
Lime, hydrated	481
Lime, wet or mortar	1540

Limonite, solid	3796
Limonite, broken	2467
Limestone, solid	2611
Limestone, broken	1554
Limestone, pulverized	1394
Linseed, whole	753
Linseed, meal	513
Locust, dry	705
Magnesite, solid	3011
Magnesium oxide	1940
Magnesium sulphate, crystal	1121
Magnetite, solid (iron ore)	5046
Magnetite, broken	3284
Malachite (copper ore)	3750 - 3960
Malt	336
Manganese, solid	7609
Manganese oxide	1922
Manure	400
Marble, solid	2563
Marble, broken	1570
Marl, wet, excavated	2243
Mica, solid	2883
Mica, broken	1602
Mica - flake	520

Mica - powder	986
Milk, powdered	449
Molybdenum ore	1600
Mortar, wet	2403
Mud, packed	1906
Mud, fluid	1730
Nickel ore	1600
Nickel, rolled	8666
Nickel silver	8442
Nitric acid, 91%	1506
Nitrogen	1.26
Oak, red	705
Oats	432
Oats, rolled	304
Oil cake	785
Oil, linseed	942
Oil, petroleum	881
Oxygen	1.43
Oyster shells, ground	849
Paper, standard	1201
Peanuts, shelled	641
Peanuts, not shelled	272
Peat, dry	400
Peat, moist	801

Peat, wet	1121
Pecan wood	753
Phosphate rock, broken	1762
Phosphorus	2339
Pitch	1153
Plaster	849
Platinum ore	2600
Porcelain	2403
Porphyry, solid	2547
Porphyry, broken	1650
Potash	1281
Potassium chloride	2002
Potatoes, white	769
Pumice, stone	641
Pyrite (fool's gold)	2400 - 5015
Quartz, solid	2643
Quartz, lump	1554
Quartz sand	1201
Resin, synthetic, crushed	561
Rice, hulled	753
Rice, rough	577
Rice grits	689
Rip-Rap	1602
Rock - soft - excavated with shovel	1600-1780

Rosin	1073
Rubber, caoutchouc	945
Rubber, manufactured	1522
Rubber, ground scrap	481
Rye	705
Salt cake	1442
Salt, course	801
Salt, fine	1201
Saltpeter	1201
Sand, wet	1922
Sand, wet, packed	2082
Sand, dry	1602
Sand, loose	1442
Sand, rammed	1682
Sand, water filled	1922
Sand with Gravel, dry	1650
Sand with Gravel, wet	2020
Sandstone, solid	2323
Sandstone, broken	1370-1450
Sawdust	210
Sewage, sludge	721
Shale, solid	2675
Shale, broken	1586
Shells - oyster	800

Sinter	1600-2180
Slag, solid	2114
Slag, broken	1762
Slag, crushed, 1/4 inch	1185
Slag, furn. granulated	961
Slate, solid	2691
Slate, broken	1290-1450
Slate, pulverized	1362
Smithsonite (zinc ore)	4300
Snow, freshly fallen	160
Snow, compacted	481
Soap, solid	801
Soap, chips	160
Soap, flakes	160
Soap, powdered	368
Soapstone talc	2400
Soda Ash, heavy	1080
Soda Ash, light	432
Sodium	977
Sodium Aluminate, ground	1153
Sodium Nitrate, ground	1201
Soy beans, whole	753
Starch, powdered	561
Stone, crushed	1602

Stone (common, generic)	2515
Sugar, brown	721
Sugar, powdered	801
Sugar, granulated	849
Sugar, raw cane	961
Sugarbeet pulp, dry	208
Sugarbeet pulp, wet	561
Sugarcane	272
Sulphur, solid	2002
Sulphur, lump	1314
Sulphur, pulverized	961
Taconite	2803
Talc, solid	2691
Talc, broken	1746
Tanbark, ground	881
Tankage	961
Tar	1153
Tobacco	320
Trap rock, solid	2883
Trap rock, broken	1746
Turf	400
Turpentine	865
Walnut, black, dry	609
Water, pure	1000

Water, sea (see liquids table)	1026
Wheat	769
Wheat, cracked	673
Wood chips - dry - see wood table	240- 520
Wool	1314
Zinc oxide	400