Densities of common Products

Densities of common products - Imperial and SI-units.

- density units converter

Note! - be aware that for many of the products listed below there is a difference between "bulk density" and actual "solid or material density". This may not be clear in the description of the products. Always double check the values with other sources before important calculations.

Material	Density (lb/ft^3) (kg/m3)
ABS resin, pellet	45 721
Acetic acid, liquid	66 1057
Acetone	49 785
Acid phosphate	60 961
Acrylic resin	33 529
Adipic acid, powder	45 721
Air - atmospheric pressure	0.0749 1.2
Alcohol, methyl	49 785
Alfalfa, ground	16 256
Almonds, shelled	30 - 35 481 - 561
Alum powder	50 801
Alumina	60 961
Aluminum hydrate	18 288
Aluminum oxide	60 - 100 961 - 1602
Aluminum silicate	35 - 45 561 - 721
Aluminum, powder	45 - 80 721 - 1281
	7 - 15

Material	Density (lb/ft^3) (kg/m3)
Apple seed	32 513
Asbestos fibers	20 - 25 320 - 400
Asbestos ore, rock	81 1297
Ash, coal, damp	45 - 50 721 - 801
Ash, coal, dry	35 - 45 561 - 721
Asphalt, liquid	65 1041
Aviation fuel (jp-4)	49 785
Bakalite, powder	30 - 40 481 - 641
Baking powder	40 - 45 641 - 721
Baking soda	70 - 80 1121 - 1281
Ball clay	25 400
Bagasse - exiting the final mill	7.5 120
Bagasse - stacked to 2 metre height (moisture = 44%)	11 176
Bark, wood refuse	10 - 20 160 - 320
Barley, flour	25 - 30 400 - 481
Barley, ground	25 - 30 400 - 481
Barley, kernal	35 - 40 561 - 641
Barley, malted	31 497
Barytes, powdered	131 2098
Bauxite, crushed	75 - 85 1201 - 1362
Beans, caster	36 577
Beans, coffee	22 - 40 352 - 641
Beans, lima	45 721
Beans, navy	48 769
Beans, soy	45 - 47 721 - 753
Bentonite, lump	25 - 40 400 - 641
Bentonite, powder	50 - 60 801 - 961
Bicarbonate of soda	41 657
Blood, dry	35 - 45 561 - 721
Bone meal	55 - 60 881 - 961
Borate of lime	50 - 70 801 - 1121
Borax	50 - 70 801 - 1121
Boric acid powder	55 881
Bran, oat	25 400
	15 - 20

Material	Density (lb/ft^3) (kg/m3)
Brick	110 1762
Bronze chips	30 - 50 481 - 801
Buckwheat	34 - 42 545 - 673
Buckwheat flour	40 641
Butter	54 865
Buttermilk powder	25 - 30 400 - 481
Cake mix	30 - 40 481 - 641
Calcium carbide	75 1201
Calcium carbonate	75 1201
Calcium oxide	27 432
Cane - whole stick, tangled and tamped down as in a cane transport vehicle	12.5 200
Cane - whole stick, neatly bundled	25 400
Cane - billetted	22 352
Cane - whole stick tangled, but loosely tipped into cane carrier	10 160
Cane - knifed	18 288
Cane - shredded	20 320
Carbide powder	100 1602
Carborundum 75mm	10 160
Carbon black powder	4 - 25 64.1 - 400
Carbon black, pellet	20 - 45 320 - 721
Carbon tetrachloride	-
Carbon, granulated, activated	50 - 60 801 - 961
Carbon, graphite	40 641
Casein powder	35 - 40 561 - 641
Cashew nuts	32 - 37 513 - 593
Caster beans	36 577
Cat food	20 - 25 320 - 400
Cellophane, flocking	5 80.1
Cellulose acetate	10 160
Cellulose, flocking	1.5 - 3 24 - 48.1
Cement powder, portland	85 - 95 1362 - 1522
Cement, clinker	75 - 90 1201 - 1442
Cereal flake	12 192
Chalk, fine	70 - 75 1121 - 1201
Chalk, lump	85 - 90 1362 - 1442

Material	Density (lb/ft^3) (kg/m3)
Cinders, coal	40 - 50 641 - 801
Citric acid	55 881
Clay, attapulgus	55 881
Clay, ball	25 400
Clay, bentonite	51 817
Clay, calcined	80 1281
Clay, dicalite	20 - 50 320 - 801
Clay, kaoline	20 - 60 320 - 961
Clay, sno-brite	15 - 50 240 - 801
Clay, whitex	15 - 50 240 - 801
Clinker, cement	80 1281
Clinker, coal	80 - 90 1281 - 1442
Coal, ground	40 641
Coal, lump	45 - 55 721 - 881
Coconut, shredded	20 - 22 320 - 352
Coffee bean, green	32 - 45 513 - 721
Coffee bean, roasted	22 - 30 352 - 481
Coffee, ground	20 320
Coke, calcined, petrol	35 - 45 561 - 721
Copper ore	135 2162
Concrete	140 - 150 2243 - 2403
Copper oxide	190 3043
Cork, ground	5 - 15 80.1 - 240
Corn bran	13 208
Corn cob, ground	35 561
Corn, cracked	35 - 40 561 - 641
Corn, flaked	6 96.1
Corn, gern	21 336
Corn, gluten	26 - 33 416 - 529
Corn, grits	40 - 45 641 - 721
Corn, ground	30 - 35 481 - 561
Corn, meal	32 - 40 513 - 641
Corn, starch	25 - 35 400 - 561
Corn, sugar, liquid	88 1410
	31

Material	Density (lb/ft^3) (kg/m3)
Cottonseed	22 - 40 352 - 641
Cottonseed hulls	12 192
Cottonseed meats	40 641
Cottonseed oil	58 929
Cottonseed, meal	35 - 40 561 - 641
Cream powder	38 609
Cullett, glass	120 1922
Dextrin	50 - 55 801 - 881
Dextrose	31 497
Diatomacaous earth	11 - 14 176 - 224
Dicalcium phosphate	43 689
Diesel fuel	52 833
Dirt, dry	65 - 80 1041 - 1281
Distillars grain	30 481
Dog food, IAMS minichunk	26 416
Dolomite, lump	88 - 99 1410 - 1586
Dolomite, powdered	45 721
Down, goose	1 16
Ebonite, crushed	65 - 70 1041 - 1121
Emery, crushed	95 1522
Epsom salt	40 - 50 641 - 801
Ethanol	56 897
Ethyl ether	44 705
Ethylene glycol	70 1121
Expancel microsphere	0.8 12.8
Farina	44 705
Feathers, goose	1 16
Feed pellets, animal	32 - 38 513 - 609
Feldspar, ground	65 - 70 1041 - 1121
Ferrous sulphate	50 - 75 801 - 1201
Fertilizer, phosphate	60 961
Fish meal	25 - 40 400 - 641
Flaxseed	40 - 45 641 - 721
Flour, barley	25 - 230 400 - 3684
	30 - 34

Material	Density (lb/ft^3) (kg/m3)
Flourospar	90 1442
Fluff, poly-fim floc	1.5 - 2 24 - 32
Fly ash	35 - 45 561 - 721
Froot loops, kellogs	8 128
Fullers earth	35 - 45 561 - 721
Gasoline	45 721
Gelatine, granulated	32 513
Gilsonite	37 593
Glass bead	120 1922
Glass cullett crushed	120 1922
Gluten, wheat	30 - 35 481 - 561
Glycerine	78 1249
Golf tees	15 240
Graphite, ground	25 - 30 400 - 481
Grass seed	10 - 35 160 - 561
Gravel	75 - 85 1201 - 1362
Grits, corn	40 - 45 641 - 721
Grits, rice	42 - 45 673 - 721
Gun powder	50 801
Gypsum, lump	90 - 100 1442 - 1602
Gypsum, powder	60 - 80 961 - 1281
Hay	5 - 24 80.1 - 384
HDPE, polethylene	35 - 40 561 - 641
Hominey	37 - 50 593 - 801
Hops	35 561
Hops, spent dry	35 561
Hydrochloric acid	75 1201
Ice, crushed	55 881
Illmenite, ground	120 1922
Iron chips	165 2643
Iron ore	150 2403
Iron oxide	180 2883
Jet fuel, jp4	51 817
Kafir	40 - 45 641 - 721
	32

Material	Density (lb/ft³) (kg/m3)
Lactose	32 513
LDPE, polyethylene	35 561
Lead oxide	30 - 150 481 - 2403
Liginite	40 - 55 641 - 881
Lima beans dry	45 721
Lime, hydreated	25 - 30 400 - 481
Lime, pebble	55 - 65 881 - 1041
Lime, quicklime	25 - 30 400 - 481
Lime, slaked	32 513
Limestone, crushed	85 - 95 1362 - 1522
Limestone, dust	68 1089
Linseed oil	58 929
Linseed, kernel	25 400
Maize, kernel	45 721
Malt sugar	30 - 35 481 - 561
Malt, dry, whole	30 - 35 481 - 561
Malt, ground, dry	20 320
Malt, spent, damp	55 - 65 881 - 1041
Malt, spent, dry	10 160
Maltodextrin powder	35 561
Manganese ore	134 2146
Manganese sulphate	69 1105
Maple syrup	85 1362
Marble, crushed	85 - 95 1362 - 1522
Menthol	49 785
Metal dust	50 - 120 801 - 1922
Methanol	49 785
Methyl alcohol	49 785
Mica	13 - 30 208 - 481
Milk powder	15 - 20 240 - 320
Milk sugar	32 513
Miller, ground	35 561
Millet seed	48 769
Mineral oil	57 913
	49

Material	Density (lb/ft^3) (kg/m3)
Mortar, wet	137 2194
Muriate of potash	77 1233
Mustard seed	45 721
Naphthalene	56 897
Napthalene flakes	45 721
Navy beans, dry	48 769
Nitrate of soda	68 1089
Nitric acid	94 1506
Nitrocellulose	25 400
Nylon	35 - 45 561 - 721
Oat flour	30 - 35 481 - 561
Oat hulls	8 - 12 128 - 192
Oat meal	35 - 40 561 - 641
Oat middlings	35 - 45 561 - 721
Oats	25 - 35 400 - 561
Oats, bran	25 400
Oats, ground	25 - 30 400 - 481
Oats, rolled	24 384
Octane	45 721
Oil, linseed	58 929
Oil, olive	57 913
Oil, petroleum, crude	53 849
Oil, sperm whale	57 913
Oil, transformer	55 881
Oil, turpentine	54 865
Oxalic acid, crystals	60 961
Oyster shells, ground	53 849
Paper, shreaded	5 - 12 80.1 - 192
Paraffin wax	45 721
PC, polycarbonate	34 - 36 545 - 577
Peanut shell refuse	4 64.1
Peanuts, shelled	35 - 45 561 - 721
Peanuts, unshelled	15 - 24 240 - 384
Peas, dry	45 - 50 721 - 801
	25 - 50

Material	Density (lb/ft³) (kg/m3)
Phosphate rock, crushed	60 - 80 961 - 1281
Phosphate sand	90 - 100 1442 - 1602
Plaster of Paris	50 - 55 801 - 881
Plastic pellet	34 - 48 545 - 769
Polyethylene, pellet	34 - 36 545 - 577
Polyvinyl chloride, powder	30 481
Polyethylene pellet	35 - 37 561 - 593
Polypropylene powder	25 400
Polypropylene, pellet	34 - 36 545 - 577
Polystyrene, expanded beads	1.5 24
Polystyrene, pellet	40 641
Polyvinyl chloride, pellet	48 - 52 769 - 833
Popcorn, popped	2 - 3 32 - 48.1
Popcorn, shelled	45 - 50 721 - 801
Potash	50 - 60 801 - 961
Potasium chloride	2 - 3 32 - 48.1
Potassium carbonate	45 - 50 721 - 801
Potassium chloride	75 1201
Potassium nitrate	76 1217
Potassium sulphate	42 - 48 673 - 769
Potato flake	12 192
Potato starch	40 641
Pumice	40 - 45 641 - 721
PVC polyvinyl chloride	48 - 52 769 - 833
Quartz, sand	80 - 100 1281 - 1602
Rape seed	45 - 50 721 - 801
Rice	45 - 50 721 - 801
Rice bran	20 320
Rice flour	30 481
Rice grits	42 - 45 673 - 721
Rock crushed	134 2146
Rubber, ground	25 - 50 400 - 801
Rye	44 705
Rye, flour	30 481
	45 - 55

Material	Density (lb/ft^3) (kg/m3)
Sand, damp	100 1602
Sand, dry	80 - 100 1281 - 1602
Sand, loose	90 1442
Sand with gravel, dry	108 1730
Sand with gravel, wet	125 2002
Sand, rammed	105 1682
Sand, silica	95 1522
Sand, water filled	120 1922
Sand, wet	120 1922
Sand, wet, packed	130 2082
Sandstone, crushed	80 - 95 1281 - 1522
Sawdust	4 - 12 64.1 - 192
Sea water	64 1025
Semolina	35 - 40 561 - 641
Sesame seed	27 - 37 432 - 593
Shellac powder	30 - 35 481 - 561
Silica flour	35 - 40 561 - 641
Silica gel	30 - 45 481 - 721
Silica sand	95 1522
Slag, furnace	60 961
Slakes lime	32 513
Slate, crushed	80 - 90 1281 - 1442
Soap powder	20 - 25 320 - 400
Soda ash	30 - 45 481 - 721
Sodium bicarbonate	41 657
Sodium chloride	70 1121
Sodium hydroxide, flake	47 753
Sodium nitrate	68 - 80 1089 - 1281
Sodium sulphate	80 1281
Sorghum seed	42 - 50 673 - 801
Soybean flour	27 - 35 432 - 561
Soybean hulls	6 96.1
Soybean meal	36 - 50 577 - 801
Soybean, flakes	18 - 25 288 - 400
	47

Material	Density (lb/ft^3) (kg/m3)
Starch powder	25 - 35 400 - 561
Steel, chips	150 2403
Sucrose - crystal	99 1586
Sucrose - amorphous	94 1506
Sugar, brown	45 721
Sugar, dextrose, powder	50 801
Sugar, granulated	53 849
Sugar, milk	32 513
Sugar, powdered	50 - 60 801 - 961
Sugar, raw	55 - 65 881 - 1041
Sulfuric acid	112 1794
Sulphur, crushed	55 - 70 881 - 1121
Sunflower seed	36 577
Talcum powder	4 - 62 64.1 - 993
Tar	72 1153
Tea leaves	12 192
Terephalic acid powder	45 721
Timothy seed	36 577
Tin oxide	100 1602
Titanium dioxide	40 - 50 641 - 801
Tobacco, flake	2 - 5 32 - 80.1
Toulene	54 865
Transmission oil	54 865
Trisodium phosphate	50 - 60 801 - 961
Urea, prill	34 - 42 545 - 673
Vermiculite ore	80 1281
Vermiculite, expanded	17 272
Walnut meats	25 400
Walnut shells, ground	40 - 45 641 - 721
Water	62 993
Wax	15 - 20 240 - 320
Wheat bran	12 192
Wheat gluten	30 - 35 481 - 561
Wheat, craked	35 - 45 561 - 721
	7 - 10

Material	Density (lb/ft^3) (kg/m3)
Wheat, whole kernel	45 - 55 721 - 881
Whey powder	35 - 46 561 - 737
Woodchips	20 - 30 320 - 481
Wood flour	15 - 25 240 - 400
Wood shavings	3 - 10 48.1 - 160
Xanthum gum	48 769
Zinc ore	125 2002
Zinc oxide	10 - 30 160 - 481
Zinc, calcined, crushed	70 - 90 1121 - 1442

- 1 lb/ft^3 = 27 lb/yd^3 = 0.009259 oz/in^3 = 0.0005787 lb/in^3 = 16.01845 kg/m^3 = 0.01602 g/cm^3 = 0.1605 lb/gal(UK) = 0.1349 lb/gal(US liq) = 2.5687 oz/gal(UK) = 2.1389 oz/gal(US liq) = 0.01205 ton(long)/yd^3 = 0.0135 ton(short)/yd^3
- Density, Specific Weight and Specific Gravity

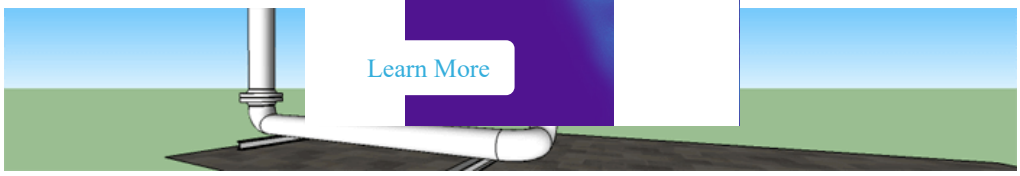
Related Topics

- **Material Properties** - Material properties of gases, fluids and solids - densities, specific heats, viscosities and more.
- **Densities** - Densities of solids, liquids and gases. Definitions and convertion calculators.

Related Documents

- **Conveyors - Maximum Inclination vs. Product** - Maximum conveyor inclination slopes for typical products.
- **Density Converter** - Online density converter with commonly used units.
- **Density vs. Specific Weight and Specific Gravity** - An introduction to density, specific weight and specific gravity.
- **Food Products - Bulk Densities** - Bulk densities of some common food products like grain, corn, barley, sugar and more.
- **Gases - Densities** - Densities and molecular weights of common gases like acetylene, air, methane, nitrogen, oxygen and others.
- **Liquids - Densities vs. Pressure and Temperature Change** - Densities and specific volume of liquids vs. pressure and temperature change.
- **Slurry - Density** - Calculate density of a slurry.
- **Soil and Rock - Bulk Factors** - Soil and rock expansion - or swell - after mining.
- **Water - Density, Specific Weight and Thermal Expansion Coefficients** - Definitions, online calculator and figures and tables with water properties like density, specific weight and thermal expansion coefficient of liquid water at temperatures ranging 0 to 360°C (32 to 680°F).
- **Wood - Densities of Various Species** - Densities of various wood species - apple, ash, cedar, elm and more.

Engineering ToolBox - SketchUp Exten



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- editor.engineeringtoolbox@gmail.com

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Length

1.0

- (•) *m*
- ( ) *km*
- ( ) *in*
- ( ) *ft*
- ( ) *yards*
- ( ) *miles*
- ( ) *naut miles*

Convert!

Area

1.0

- (•) m^2
- ( ) km^2
- ( ) in^2
- ( ) ft^2
- ( ) $miles^2$
- ( ) *acres*

Convert!

Volume

1.0

- (•) m^3
- ( ) *liters*
- ( ) in^3
- ( ) ft^3
- ( ) *us gal*

Convert!

Weight

1.0

- (•) kg_f
- ( ) *N*
- ( ) lb_f

Convert!

Velocity

1.0

- (•) *m/s*
- ( ) *km/h*
- ( ) *ft/min*
- ( ) *ft/s*
- ( ) *mph*
- ( ) *knots*

Convert!

- (•) *Pa (N/m²)*
- ( ) *bar*
- ( ) *mm H_2O*
- ( ) *kg/cm²*
- ( ) *psi*
- ( ) *inches H_2O*

Convert!

Flow

1.0

- (•) *m³/s*
- ( ) *m³/h*
- ( ) *US gpm*
- ( ) *cfm*

Convert!

Scientific Online Calculator

9 1

print view

Make Shortcut to Home Screen?