

DENSITY OF VARIOUS SOLIDS

This table gives the range of density for miscellaneous solid materials whose characteristics depend on the source or method of preparation.

REFERENCES

1. Forsythe, W. E., *Smithsonian Physical Tables, Ninth Edition*, Smithsonian Institution, Washington, 1956.
2. Kaye, G. W. C., and Laby, T. H., *Tables of Physical and Chemical Constants, 16th Edition*, Longman, London, 1995.
3. Brandrup, J., and Immergut, E. H., *Polymer Handbook, Third Edition*, John Wiley & Sons, New York, 1989.

| Material | $\rho / \text{g cm}^{-3}$ | Material | $\rho / \text{g cm}^{-3}$ | Material | $\rho / \text{g cm}^{-3}$ |
|----------------|---------------------------|---------------------------|---------------------------|------------------|---------------------------|
| Agate | 2.5-2.7 | Pyrex | 2.23 | Soapstone | 2.6-2.8 |
| Alabaster, | | Granite | 2.64-2.76 | Solder | 8.7-9.4 |
| carbonate | 2.69-2.78 | Graphite | 2.30-2.72 | Starch | 1.53 |
| sulfate | 2.26-2.32 | Gum arabic | 1.3-1.4 | Steel, stainless | 7.8 |
| Albite | 2.62-2.65 | Gypsum | 2.31-2.33 | Sugar | 1.59 |
| Amber | 1.06-1.11 | Hematite | 4.9-5.3 | Talc | 2.7-2.8 |
| Amphiboles | 2.9-3.2 | Hornblende | 3.0 | Tallow, beef | 0.94 |
| Anorthite | 2.74-2.76 | Ice | 0.917 | Tar | 1.02 |
| Asbestos | 2.0-2.8 | Iron, cast | 7.0-7.4 | Topaz | 3.5-3.6 |
| Asbestos slate | 1.8 | Ivory | 1.83-1.92 | Tourmaline | 3.0-3.2 |
| Asphalt | 1.1-1.5 | Kaolin | 2.6 | Tungsten carbide | 14.0-15.0 |
| Basalt | 2.4-3.1 | Leather, dry | 0.86 | Wax, sealing | 1.8 |
| Beeswax | 0.96-0.97 | Lime, slaked | 1.3-1.4 | Wood (seasoned) | |
| Beryl | 2.69-2.70 | Limestone | 2.68-2.76 | alder | 0.42-0.68 |
| Biotite | 2.7-3.1 | Linoleum | 1.18 | apple | 0.66-0.84 |
| Bone | 1.7-2.0 | Magnetite | 4.9-5.2 | ash | 0.65-0.85 |
| Brasses | 8.44-8.75 | Malachite | 3.7-4.1 | balsa | 0.11-0.14 |
| Brick | 1.4-2.2 | Marble | 2.6-2.84 | bamboo | 0.31-0.40 |
| Bronzes | 8.74-8.89 | Meerschaum | 0.99-1.28 | basswood | 0.32-0.59 |
| Butter | 0.86-0.87 | Mica | 2.6-3.2 | beech | 0.70-0.90 |
| Calamine | 4.1-4.5 | Muscovite | 2.76-3.00 | birch | 0.51-0.77 |
| Calcspars | 2.6-2.8 | Ochre | 3.5 | blue gum | 1.00 |
| Camphor | 0.99 | Opal | 2.2 | box | 0.95-1.16 |
| Cardboard | 0.69 | Paper | 0.7-1.15 | butternut | 0.38 |
| Celluloid | 1.4 | Paraffin | 0.87-0.91 | cedar | 0.49-0.57 |
| Cement, set | 2.7-3.0 | Peat blocks | 0.84 | cherry | 0.70-0.90 |
| Chalk | 1.9-2.8 | Pitch | 1.07 | dogwood | 0.76 |
| Charcoal, | | Polyamides | 1.15-1.25 | ebony | 1.11-1.33 |
| oak | 0.57 | Polyethylene | 0.92-0.97 | elm | 0.54-0.60 |
| pine | 0.28-0.44 | Poly(methyl methacrylate) | 1.19 | hickory | 0.60-0.93 |
| Cinnabar | 8.12 | Polypropylene | 0.91-0.94 | holly | 0.76 |
| Clay | 1.8-2.6 | Polystyrene | 1.06-1.12 | juniper | 0.56 |
| Coal, | | Polytetrafluoroethylene | 2.28-2.30 | larch | 0.50-0.56 |
| anthracite | 1.4-1.8 | Poly(vinyl acetate) | 1.19 | locust | 0.67-0.71 |
| bituminous | 1.2-1.5 | Poly(vinyl chloride) | 1.39-1.42 | logwood | 0.91 |
| Coke | 1.0-1.7 | Porcelain | 2.3-2.5 | mahogany | 0.66-0.85 |
| Copal | 1.04-1.14 | Porphyry | 2.6-2.9 | maple | 0.62-0.75 |
| Cork | 0.22-0.26 | Pyrite | 4.95-5.10 | oak | 0.60-0.90 |
| Corundum | 3.9-4.0 | Quartz | 2.65 | pear | 0.61-0.73 |
| Diamond | 3.51 | Resin | 1.07 | pine, pitch | 0.83-0.85 |
| Dolomite | 2.84 | Rock salt | 2.18 | white | 0.35-0.50 |
| Ebonite | 1.15 | Rubber, | | yellow | 0.37-0.60 |
| Emery | 4.0 | hard | 1.19 | plum | 0.66-0.78 |
| Epidote | 3.25-3.50 | soft | 1.1 | poplar | 0.35-0.50 |
| Feldspar | 2.55-2.75 | pure gum | 0.91-0.93 | satinwood | 0.95 |
| Flint | 2.63 | Neoprene | 1.23-1.25 | spruce | 0.48-0.70 |
| Fluorite | 3.18 | Sandstone | 2.14-2.36 | sycamore | 0.40-0.60 |
| Galena | 7.3-7.6 | Serpentine | 2.50-2.65 | teak, Indian | 0.66-0.98 |
| Garnet | 3.15-4.3 | Silica, fused, | 2.21 | walnut | 0.64-0.70 |
| Gelatin | 1.27 | Silicon carbide | 3.16 | water gum | 1.00 |
| Glass, | | Slag | 2.0-3.9 | willow | 0.40-0.60 |
| common | 2.4-2.8 | Slate | 2.6-3.3 | Wood's metal | 9.70 |
| lead | 3-4 | | | | |