



SPECIFIC HEAT VALUES AND WEIGHTS

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COMMONLY USED SPECIFIC HEAT VALUES AND WEIGHTS:

	<u>Cp</u> <u>BTU/#/°F</u>	<u>Weight</u> <u>#/Cu. Ft.</u>
ABS	0.49	----
Acetate/Acetone	0.50	81.2
Acetic Acid	0.49	66
Acetylene	0.35	0.068
Air	0.237	0.08
Alcohol	0.65	49
Aluminum	0.23	165
American Cheese	0.36	----
Ammonia	1.16	0.048
Antimony	0.052	1166
Argon	0.124	0.1033
Asbestos	0.20	----
Asphalt	0.40	81
Beeswax	0.67	60
Benzene	0.41	----
Benzine	0.45	46
Bismuth	0.029	612
Brass	0.092	532
Brickwork and Masonry	0.20	144
Bronze	0.082	----
Carbon	0.204	----
Carbon Dioxide	0.203	0.1144
Carbon Monoxide	0.243	0.0725
Chlorine	0.125	0.1853
Chocolate, above freezing	0.30	
Chocolate, below freezing	0.55	
Melting 40 BTU/#		
Concrete	0.21	----
Copper	0.091	558
Crest Toothpaste	0.85	----
Epoxy	0.47	81
Ethylene	0.37	0.078
Ethylene Glycol/H ₂ O (@ 60°F):		
- 20/80	0.93	----
- 25/75	0.92	64
- 40/60	0.84	----
- 50/50	0.79	66
Freon-12	0.24	----
Gasoline	0.53	----
Glass	0.20	170
Glycerine	0.58	79
Gold, pure	0.031	----
Graphite	0.20	130
Helium	1.25	0.0103
Honey	0.51	----
Hydrochloric Acid	0.189	0.095
Hydrogen	3.41	0.0056



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	<u>Cp</u> <u>BTU/#/°F</u>	<u>Weight</u> <u>#/Cu. Ft.</u>
Ice	0.49	----
Iron	0.12	450
Kaolin, clay-water (brick material)	0.855	----
Ketsup	0.70	----
Lard, above freezing	0.52	
Lard, below freezing	0.31	
Melting 90 BTU/#		
Lead, pure	0.031	710
Lead, melted	0.04	----
Magnesium	0.245	109
Mercury	0.033	845
Methane	0.536	0.0446
Methyl Chloride	0.197	0.142
Nickel	0.11	537
Nitric Acid, 60%:		
50 Deg. F	0.63	----
70 Deg. F	0.64	----
100 Deg F	0.66	----
200+ Deg F	0.71	----
Nitric Oxide	0.237	0.0777
Nitrogen	0.249	0.073
Nylon	0.40	69.1
Oil, cottonseed	0.47	60
Oil, hydraulic	0.44	----
Oil, light hydrocarbon	0.50	----
Oil, SAE 10W & 30W	0.45	----
Oil, soybean	0.45	----
Oil, transmission @ 180 Deg. F (10 weight)	0.50	----
Oxygen	0.219	0.083
Paper	0.45	58
Paraffin	0.71	56
Paratherm	0.50-0.60	----
Paratin	0.70	56
Peanut butter @ 100 Deg. F	0.474	----
Petroleum	0.51	54
Petroleum,jelly	0.56	----
Phenolic	0.40	79.5
Plastic	0.65	----
Polyethylene	0.55	60.5
Polyurethane	0.55	----
Rubber	0.48	75
Silver	0.056	655
Solder (50% lead-50% tin)	0.04	580
Sour cream	0.70	----
Steel	0.12	487
Sugar	0.30	105
Sulphur, solid	0.203	125
Sulphur, melted	0.234	----



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	<u>Cp</u> BTU/#/°F	<u>Weight</u> #/Cu. Ft.
Sulphur dioxide	0.149	0.166
Syrup, hot fudge	0.64	----
Syrup, maple	0.51	----
Teflon	0.25	135
Tin	0.054	456
Titanium	0.13	----
Tungsten	0.032	----
Turpentine	0.42	54
Vinyl	0.30-0.50	79.5
Water	1.0	62.4
Wood	0.52	45 (average
Zinc	0.095	440