

**TABLE #1: Specific Heat Capacity of Various Substances**

| Substance        | Specific Heat Capacity<br>(J/kg .°C) |
|------------------|--------------------------------------|
| aluminum         | 900                                  |
| brick            | 3 000                                |
| concrete         | 2 900                                |
| copper           | 390                                  |
| glass            | 840                                  |
| gold             | 130                                  |
| human body       | 3 470                                |
| ice              | 2 116                                |
| iron             | 460                                  |
| lead             | 130                                  |
| protein          | 1 700                                |
| rock             | 880                                  |
| sand             | 800                                  |
| silver           | 230                                  |
| wood             | 1 760                                |
| alcohol (ethyl)  | 2 300                                |
| alcohol (methyl) | 2 500                                |
| glycerine        | 2 400                                |
| mercury          | 140                                  |
| vegetable oil    | 2 000                                |
| water            | 4 200                                |
| air              | 995                                  |
| carbon dioxide   | 836                                  |
| helium           | 5 250                                |
| hydrogen         | 14 400                               |
| nitrogen         | 1 040                                |
| oxygen           | 916                                  |
| steam            | 2 020                                |

**TABLE #2: Specific Latent Heat of Fusion and of Vapourization**

| Substance        | Latent Heat of Fusion<br>(J/kg) | Latent Heat of Vapourization<br>(J/kg) |
|------------------|---------------------------------|--|
| alcohol (ethyl)  | $1.4 \times 10^4$               | $8.5 \times 10^5$                      |
| alcohol (methyl) | $6.8 \times 10^4$               | $1.1 \times 10^6$                      |
| aluminum         | $9.0 \times 10^4$               | $1.1 \times 10^7$                      |
| Glauber's salts  | $2.2 \times 10^5$               | -----                                  |
| iron             | $2.5 \times 10^5$               | $6.3 \times 10^6$                      |
| lead             | $2.5 \times 10^4$               | $8.7 \times 10^5$                      |
| nitrogen         | $2.5 \times 10^4$               | $2.0 \times 10^5$                      |
| oxygen           | $1.4 \times 10^4$               | $2.1 \times 10^5$                      |
| silver           | $8.8 \times 10^4$               | $2.3 \times 10^6$                      |
| water            | $3.3 \times 10^5$               | $2.3 \times 10^6$                      |
| gold             | $6.3 \times 10^4$               | $1.045 \times 10^6$                    |