

Mg

Source of data: CODATA [HCP_A3, LIQUID]
 Hack (unpublished work) [BCC_A12]
 Tibbals (unpublished work) [CUB_A13]
 Saunders et al. [BCC_A2, FCC_A1]

Data for Mg in the form of G-HSER

HCP_A3

$$-8367.34 + 143.675547 T - 26.1849782 T \ln(T) + 0.4858E-3 T^2 - 1.393669E-6 T^3 + 78950 T^{-1} \quad (298.15 < T < 923)$$

$$-14130.185 + 204.716215 T - 34.3088 T \ln(T) + 1.0382E28 T^{-9} \quad (923 < T < 3000)$$

LIQUID

$$-165.097 + 134.838617 T - 26.1849782 T \ln(T) + 0.4858E-3 T^2 - 1.393669E-6 T^3 + 78950 T^{-1} - 8.0176E-20 T^7$$

$$-5439.869 + 195.324057 T - 34.3088 T \ln(T) \quad (298.15 < T < 923)$$

$$(923 < T < 3000)$$

BCC_A12

$$-3764.94 + 140.664547 T - 26.1849782 T \ln(T) + 0.4858E-3 T^2 - 1.393669E-6 T^3 + 78950 T^{-1} \quad (298.15 < T < 923)$$

$$-9527.785 + 201.705215 T - 34.3088 T \ln(T) + 1.0382E28 T^{-9} \quad (923 < T < 3000)$$

BCC_A2

$$-5267.34 + 141.575547 T - 26.1849782 T \ln(T) + 0.4858E-3 T^2 - 1.393669E-6 T^3 + 78950 T^{-1} \quad (298.15 < T < 923)$$

$$-11030.185 + 202.616215 T - 34.3088 T \ln(T) + 1.0382E28 T^{-9} \quad (923 < T < 3000)$$

CUB_A13

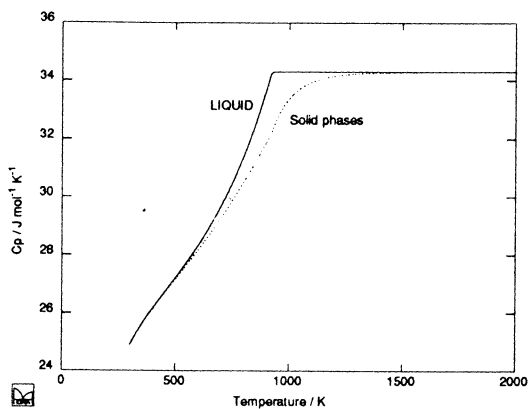
$$-3367.34 + 140.675547 T - 26.1849782 T \ln(T) + 0.4858E-3 T^2 - 1.393669E-6 T^3 + 78950 T^{-1} \quad (298.15 < T < 923)$$

$$-9130.185 + 201.716215 T - 34.3088 T \ln(T) + 1.0382E28 T^{-9} \quad (923 < T < 3000)$$

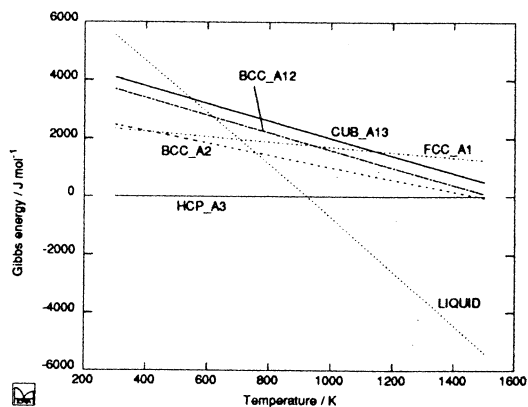
FCC_A1

$$-5767.34 + 142.775547 T - 26.1849782 T \ln(T) + 0.4858E-3 T^2 - 1.393669E-6 T^3 + 78950 T^{-1} \quad (298.15 < T < 923)$$

$$-11530.185 + 203.816215 T - 34.3088 T \ln(T) + 1.0382E28 T^{-9} \quad (923 < T < 3000)$$



Heat capacity of Mg



Gibbs energy of phases of Mg relative to HCP_A3

Data relative to HCP_A3

LIQUID

$$8202.243 - 8.83693 T - 8.0176E-20 T^7 \quad (298.15 < T < 923)$$

$$8690.316 - 9.392159 T - 1.0382E28 T^{-9} \quad (923 < T < 3000)$$

BCC_A12

$$4602.4 - 3.011 T \quad (298.15 < T < 3000)$$

BCC_A2

$$3100 - 2.1 T \quad (298.15 < T < 3000)$$

CUB_A13

$$5000 - 3 T \quad (298.15 < T < 3000)$$

FCC_A1

$$2600 - 0.9 T \quad (298.15 < T < 3000)$$