

Iron (201108) Mangan (201108) Manganese

D) The mixture would be liquid.

(I)

(II) As the mixture cools to 420°C , the mixture will remain liquid. The face centred cubic silver begins to crystallize at 420°C and crystallizes out of the BCC. The BCC will follow the sloped line meaning the percentage of tin will increase. The tin becomes more pure.

Once the liquid reaches 221°C the liquid is 96.5% pure. At this point the mixture is a solid since the melting point of tin is 232°C .