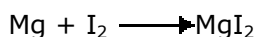


Exercise 1.32 – Reacting masses

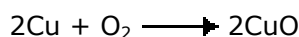
Q132-01 Calculate the mass of Magnesium required to completely with 2.54g of iodine according to the equation:



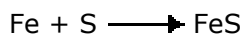
Q132-02 Calculate the mass of sodium required to completely with 3.2g of oxygen, according to the equation:



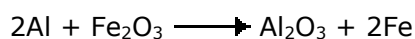
Q132-03 Calculate the mass of copper required to completely with 1.6g of oxygen, according to the equation:



Q132-04 Calculate the mass of sulphur required to react completely with 5.6g of iron according to the equation:

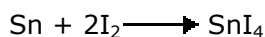


Q132-05 In a thermit reaction aluminium reacts with iron III oxide according to the equation:



Calculate the mass of aluminium needed to fully react with 80g of iron III oxide.

Q132-06 The reaction between iodine and tin proceeds according to the equation:



Calculate the mass of iodine needed to fully react with 2.38g of tin [Ar 119].

Q132-07 The reaction between ammonium chloride and calcium hydroxide proceeds according to the equation:



Calculate the mass of ammonium chloride needed to produce 34g of ammonia.

Q132-08 Calculate the mass of aluminium needed to produce 1.12kg of iron using the thermit reaction, assuming that there is enough iron III oxide:



Q132-09 Calculate the mass of carbon dioxide produced when 10g of calcium carbonate is completely dissolved in excess hydrochloric acid. [Ca=40, O=16, C=12]

Q132-10 Calculate the mass of dibromoethane formed when 20.5g of cyclohexene, C_6H_{10} , reacts with excess bromine water according to the equation:

