

Fe questions

Source: <http://sci.tech-archive.net/Archive/sci.chem/2004-06/0368.html>

From: Hugh Janus (*HughJanus_at_bigfoot.com*)

Date: 06/12/04

Date: Sat, 12 Jun 2004 20:55:41 +1200

The amount of Fe in a 1.0230g sample of the iron ore hematite Fe_2O_3 , was determined as follows:

the sample was transferred to a 250ml conical flask and completely dissolved in diluted hydrochloric acid. All the iron was then present as Fe^{2+} (aq).

The contents of the flask were then titrated with a solution of potassium permanganate of concentration $0.0195 \text{ mol L}^{-1}$ until the first permanent pink colour was obtained. At this point, 24.35ml of permanganate had been added.

Calculate:

The percentage of iron, Fe, in the ore;

The percentage of hematite, Fe_2O_3 in the ore..

HOW?

HELP!