

Re: chemistry equilibrium

Source: <http://sci.tech-archive.net/Archive/sci.chem/2004-10/0019.html>

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Date: 09/30/04

Date: Thu, 30 Sep 2004 15:46:11 GMT

- > $2\text{NO}_2(\text{g}) \rightleftharpoons \text{N}_2\text{O}_4(\text{g})$
- >
- > 138g of N_2O_4 were put into a vessel of volume 4.00 dm^3 . At
- > equilibrium 17.25g of NO_2 were present. Calculate
- > a) the no. of moles initially present and the no. of moles of NO_2 at
- > equilibrium
- > b) the no. of moles of each component at equilibrium
- > c) the total no. of moles of all components present
- > d) the fractions of each
- > e) if the total pressure is 10^6 Pa the partial pressure of each
- > f) K_p for equilibrium
- > g) use your data from b) to find the concentration of each component
- > in mol dm^{-3}
- > h) find K_c for this equilibrium

This group can help you with your homework, but we will not do it for you. Let's start with a. Do you know how to find the molar mass of those two molecules? You'll need a periodic table that shows the molar mass of each atom. That, plus some simple math, should get you down to d at least.