**Reaction Feasibility and Kinetic Stability**

What does reaction feasibility mean?

If a reaction is feasible it will proceed without any outside influence.

E.g. the combustion of hydrogen is a feasible reaction



2H2(g) + O2(g) 🡪 2H2O(l)



However, if we mix hydrogen and oxygen together they do not spontaneously combust.

They need a spark to ignite them. The reaction has a high activation energy.



The mixture is considered to be kinetically stable or inert.

**Summary**

Although a reaction may be feasible this does not mean it will always just occur. The reaction mixture may be kinetically stable and so have a high activation energy in order to react.