

Karl Fischer Titration: Determination of Water Content in Pharmaceuticals

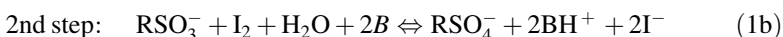
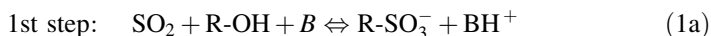
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1 BASICS

The Karl Fischer titration is based on the reaction from iodine with sulfur dioxide in alcohol in the presence of water.

During the determination water reacts stoichiometric with iodine in presence of an excess of sulfur dioxide. The reaction investigated thoroughly by Scholz (1) proceeds in two steps:



B = Base as imidazole

One mole iodine reacts with one mole water.