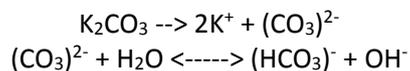


Answer on Question#38672, Chemistry, Other

Apparently, the most appropriate and simple test to differentiate potassium carbonate from lithium sulfate is pH-test of water solutions of these salts.

Potassium carbonate (K_2CO_3) forms a strongly alkaline solution due to partial hydrolysis:



The alkalinity can be easily detected using reagent paper (litmus).

Conversely, pH of lithium sulfate (Li_2SO_4) will be closely to 7 (neutral) because no hydrolysis occurs in this case. The salt will be dissociated only:

