Answer on Question #75955, Chemistry / General Chemistry

Explain what would be the consequences if you did not add an Alka-Seltzer tablet to the water before doing the experiment.

Answer

An Alka-Seltzer tablet contains citric acid and sodium bicarbonate that do not react with each other until water is added. But if a drop of water gets on it, the electrolyte dissociation occurs and the following reaction starts:

 $3NaHCO_3 + C_3H_5O(COOH)_3 \rightarrow Na_3C_3H_5O(COO)_3 + 3H_2O + 3CO_2 \uparrow$

During this reaction big volume of gas is emitted.

The reaction undergoes only between ions that is why the presence of water is so necessary.

Answer provided by AssignmentExpert.com