Acetylene lab

Science, Chemistry

Chemistry 12 Acetylene Lab March 8th, 2013 Hypothesis If the amount of gas is increase, it would have a fully combustion because it contains more carbon ions after the combination. Observation% of gas in the test tube (approximately) % of O2 in the test tube (approximately) Black soot What kind of sound is produced? Trail# 1 70. 00% 30. 00% Yes (Whole test tube) “ Puff” Trail# 2 50. 00% 50. 00% Yes “ Puff” Trail# 3 10. 00% 90. 00% Few(head of the test tube) High pitch “ Pop” Discussion

The observation table do not support the hypothesis, since it shows the result that as the amount of acetylene gas decreases and oxygen gas increases, there would be a greater chance of a complete combustion. In trail# 1, investigators use 70% acetylene gas and 30% of oxygen gas, which become incomplete combustion. Black soot represents pure carbon, which means it do not have a complete combustion since fully combustion's formula should have a double replacement which form carbon dioxide and water vapour. Also, when a complete combustion occurs, the test tube should be clean, because there is more oxygen gas to burn the acetylene gas.

However, during the experiment, the investigators make some human errors such as do not use precise measurement for the acetylene gas and the oxygen gas, acetylene gas leaked from the test tube etc. Conclusion Even though this experiment do not have a fully complete combustion, the investigators can still predict that the less volume of acetylene gas are in the test tube and more volume of oxygen gas are in the test tube, it will have a better chance to form a complete combustion. To improve the quality of the

experiment, ensure to use precise measurement and make less human errors as possible or perform the experiment few more times.