

Abstract

Project Title:

Project ID:

Abstract

A brief explanation of your project. Enables judges to receive a base understanding of your project and work.

This project tests which grade of gasoline produces the least amount of carbon monoxide (CO). If one grade of gasoline produces less CO than the others, then that gasoline should be used more often in order to release less carbon monoxide into the atmosphere. If people are not aware of how much CO they are breathing in it is possible for them to get carbon monoxide poisoning. Some effects include dizziness, headache and in severe cases, death. This experiment was completed using a lawnmower, carbon monoxide meter, 87 octane level gasoline, 89 octane level gasoline, 93 octane level gasoline and stabilizer oil. Set up a CO meter two feet away from the exhaust of the lawnmower. Fill the lawnmower with half liter of 87 octane level gasoline. Then turn on the meter. Start the lawnmower and a stopwatch at the same time. Record the level of carbon monoxide at 2, 4 and 6 minutes. Then stop the engine. Mix in 30 mL of oil stabilizer. Start the stopwatch and lawnmower again. Record the level of carbon monoxide at the same intervals. Repeat with the 89 octane (midgrade) gasoline and 93 octane (premium) gasoline. The 93 octane (premium) gasoline was hypothesized to produce the least amount of CO. However, the 87 octane (regular) gasoline mixed with stabilizer actually produced the least amount of CO. The 89 octane (midgrade) gasoline produced the most amount of CO. The premium gasoline ended up producing the second most amount of carbon monoxide. Furthermore, the stabilizer oil decreased the amount of CO produced in all three grades of gasoline. The hypothesis was not supported. In conclusion, the regular grade of gasoline mixed with stabilizer oil produces the least amount of CO.

Items to Include:

Introduction: Why did you do this project and why is it important? How will this effect people and why is it needed. Inspire the reader to continue learning more about your research and read your report.

Problem Statement and Engineering Goal / Hypothesis: What is the problem you were solving and what was your engineering goal or hypothesis.

Procedures: How did you solve the problem and or test your hypothesis. Don't go into details, provide a broad, conceptual view of what you did. For engineering, what was your design criteria.

Results: What was the outcome? Use your data and numbers to describe your result.

Conclusion: Was your hypothesis supported or the engineering goal met?