

Gas Chromatograph Worksheet

Part 1. Air Sample

Retention Time _____ sec

Retention Time _____ sec

Retention Time _____ sec

Average tR (air) _____ sec

Part 2. Halogenated Hydrocarbons

Vapor Sample Tested	Time–Green-Blue Color First Appears (sec)	Time–Maximum Green-Blue Flame (sec)	Time–Green-Blue Color Disappears (sec)	Maximum Flame Color Intensity (1–10)	Band-Width* (sec)

*The bandwidth is the difference, in seconds, between the time the green-blue color of the flame disappears, and the time the green-blue color first appears.

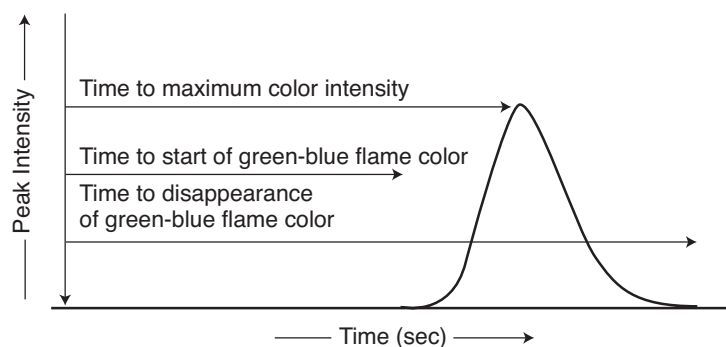


Figure 18.

Post-Demonstration Calculations *(Show answers on a separate sheet of paper.)*

- For each halocarbon tested, calculate the average values for the following data: the time the green-blue flame color first appears, the time the maximum color intensity is observed, the time the green-blue flame color disappears, the bandwidth, and the maximum color intensity.
- Reproduce Figure 18 on graph paper for each hydrocarbon sample used in this demonstration. Place time, in seconds on the *x*-axis and relative green-blue flame color intensity on the *y*-axis.
- (Optional)* Reproduce Figure 18 on graph paper for any mixed hydrocarbon sample used in this demonstration. Place time, in seconds, on the *x*-axis and relative green-blue flame color on the *y*-axis.