

# Halogenoalkane Combustion

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1.0.0

## Revision History

Revision	Date	Author(s)	Description
1.0.0	09.11.2016	Sam White	Initial Version

## 1 Sequential Method

1. Put a few drops of the halogenoalkane onto a watch glass in a fume cupboard.
2. Set fire to the halogenoalkane.

### 1.1 Diagram

N/A

### 1.2 Reasons for Method

- The combustion must be completed in a fume cupboard as toxic gasses are evolved during the combustion of the halogenoalkane.
- Small amounts of the halogenoalkane are used to minimise the safety risk from the production of these toxic gasses.
- A watch glass is used in order to allow the process to be easily observed.

### **1.3 Uncertainties in any Measurements**

N/A

## **2 Results and Observations**

The halogenoalkane does not readily combust.

### **2.1 Processed Results**

N/A

### **2.2 Calculations**

N/A

### **2.3 Uncertainty in Final Answer**

N/A

## **3 Conclusions Drawn**

Halogenoalkanes are not particularly flammable since they readily decompose to release halogen atoms when they burn. These halogen atoms react with the radicals involved in propagating the combustion reaction and hence stop it. Halogenoalkanes have historically been used in fire suppression systems for this reason.

## **4 Evaluation**

### **4.1 Systematic Errors**

N/A

### **4.2 Uncertainties**

N/A