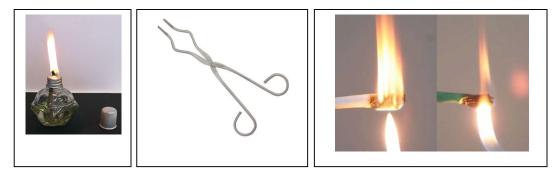
## **EXPERIMENT - 1**

# FLAME TEST

- **Aim** : Identifying thermo plastics and thermo setting plastics by Flame test.
- **Required** : Spirit burner, Match box, Pair of tongs, Samples of plastics like comb, tooth brush, piece of broken bucket, handle of utensils, electric switch, piece of melamine, piece of plastic mug, water bottle, milk packet cover, piece of water pipe, polythene cover.
- **Description**: Plastics which get deformed easily on heating and can be bent easily are known as Thermo plastics. There are some plastics which molded once can't be softened by heating are called Thermo setting plastics.



#### Procedure:

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- 1. Take a spirit lamp at lit it.
- 2. Hold a piece of plastic (Say comb) with the pair of tongs.
- 3. Place the sample plastic piece on the flame of spirit lamp.
- 4. Observe the changes in that piece on heating.
- 5. Note down the observations in the table.
- 6. Repeat the same procedure for the remaining samples of plastic pieces.

#### **Observations:**

Sl. No.	Plastic sample	Softened / burnt with burning smell / become hard	Thermo plastic / Thermo setting plastic
1	Comb		
2	Piece of tooth brush		

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Sl. No.	Plastic sample	Softened / burnt with burning smell / become hard	Thermo plastic / Thermo setting plastic
3	Piece of broken bucket		
4	Handle of utensils		
5	Electric switch		
6	Piece of melamine		
7	Piece of plastic mug		
8	Water bottle		
9	Milk packet cover		
10	Piece of water pipe		
11	Polythene cover		

### **Precautions :**

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- Wear a mask to cover nose and mouth to avoid breathing the fumes.
- Heat the substances carefully with spirit lamp.
- **Result :** The given samples of plastic pieces are classified as thermo plastics and thermo setting plastics by Flame test.

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