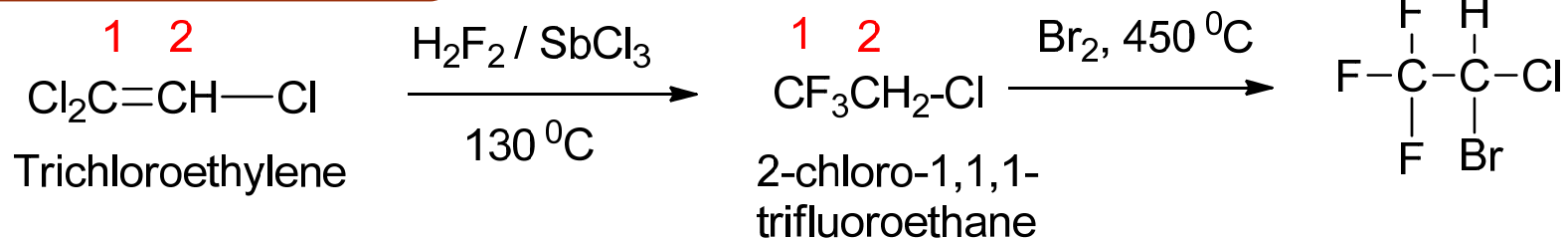


# Halothane



**MOA:** Halothane causes anesthesia due to its actions on multiple **ion channels**, which ultimately **depresses nerve conduction, breathing, cardiac contractility**. Its effects have been attributed to its binding to **potassium channels** in cholinergic neurons. Halothane's effect are also likely due to binding to **NMDA** receptor and **calcium channels**, causing **hyperpolarization**.

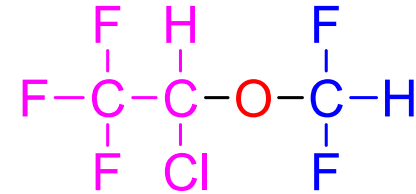
**Uses:** Halothane is a modern and widely used **inhalation anesthetic**. It is used in both short and long-lasting surgical operations. It acts very quickly, which is pleasing to patients, and it is very safe.

## Enflurane

**MOA:** Enflurane acts as a positive **allosteric modulator** of the  $GABA_A$  receptor. It also inhibits receptor activity in the NMDA glutamate receptor subtypes. These yield a **decreased depolarization** and therefore, tissue excitability which results in anesthesia.

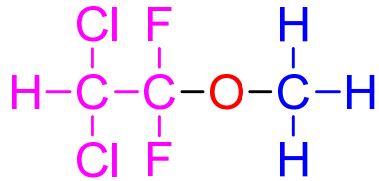
**Uses:** Used for the induction and maintenance of general anaesthesia during surgery and as analgesia during child delivery.

## Isoflurane



**MOA:** Similar to enflurane.  
**Uses:** Used for the induction and maintenance of general anaesthesia during surgery and cesarean section and also used for analgesia during child delivery.

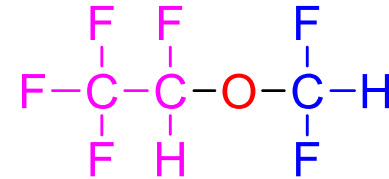
## Methoxyflurane



**MOA:** Similar to enflurane.

**Uses:** Used for the induction and maintenance of general anaesthesia during surgery and for analgesia during child delivery.

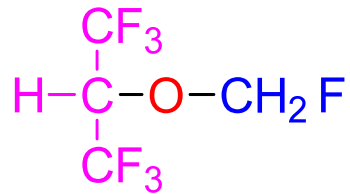
## Desflurane



**MOA:** Similar to enflurane.

**Uses:** Used for the induction and maintenance of general anaesthesia during surgery and cesarean section and also used for analgesia during child delivery.

## Sevoflurane



**MOA:** Similar to enflurane.

**Uses:** Used for the induction and maintenance of general anesthesia during surgery and also as analgesia during child delivery.