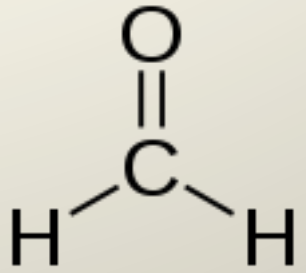
Chemical Safety Data: FORMALDEHYDE



Hazard: harmful Hazard: corrosive

Common synonyms: Formalin, paraform, methylene glycol, methyl aldehyde

Formula: **CH_2O**

Physical properties:

Form: normally supplied as a colourless solution in water, (at a strength of around 37%); becomes cloudy at temperatures lower than 21 C
Stability: Stable
Melting point: depends upon the concentration of the solution; close to 0 C
Boiling point: depends upon the concentration of the solution; a little below 100 C
Specific gravity: around 1.1

Principal hazards

*** Formaldehyde presents a range of hazards to health. It is toxic if you swallow or inhale it and is also toxic if absorbed through the skin.
*** Chronic (long-term) exposure to formaldehyde, particularly through inhalation, is dangerous since there is some possibility that it may act as a carcinogen in humans. Chronic exposure may also damage the kidneys.
*** Formaldehyde solutions are corrosive and can cause burns to the skin or eyes and damage to the upper respiratory tract.
*** Susceptible people may develop an allergic reaction to formaldehyde.

Safe handling

Wear safety glasses. Good ventilation is essential. Do not work in conditions where you are exposed to high levels of vapor for prolonged periods.

Emergency

Eye contact: Immediately flush the eye with water and continue for several minutes. Call for medical help.
Skin contact: Wash off with soap and water. If there are signs of burns or the skin reddens, seek medical help.
If swallowed: Wash out the mouth with water if the person is conscious. Call for medical help.

Disposal

Store in a clearly-labeled container for later disposal as liquid waste. Do not pour into sinks.

Protective equipment

Safety glasses, butyl or nitrile rubber gloves.

How do we use formaldehyde?

formaldehyde gel electrophoresis for RNA analysis

used in gel and samples

WORK ALWAYS in FUME HOOD for GEL and SAMPLE PREPARATION

Safe running buffer as liquid hazardous waster (w/ formaldehyde and EtBr)

EtBr and formaldehyde should both **not** go down the drain!