



Identification and Substance Specifications:

A colorless substance with an alcoholic odor; in pure form, it has a pungent and unpleasant smell. At a concentration of **10 ppm**, its odor can be detected by inhalation.

Boiling Point: 64.5 °C

Water Solubility: Soluble

Freezing Point: -97.8 °C

Molecular Weight: 32.05

Auto Ignition Temperature: 878 °C

Density at 20°C: 0.7924 g/cm³

Hazard Identification:

Methanol is flammable; it burns with an invisible flame and is highly flammable, but does not ignite spontaneously in ambient air. Mixtures of methanol and air can form explosive vapors. Its vapors are heavier than air and may travel a considerable distance to an ignition source, causing flashback or explosion. Combustion of methanol produces toxic gases such as **CO₂**, **CO** and formaldehyde.

Emergency Measures for Accidental Release:

- Immediately evacuate from the fire area, heat source, or spark to a safe environment.
- Move with the wind direction to avoid vapor exposure.
- Eliminate all sources of ignition from the area.
- Ventilate the area thoroughly.
- Use non-sparking tools for cleaning, and avoid vapor contact with heat or electrical sources.

First Aid Measures:

- **Skin Contact:** Wash with large amounts of water immediately before transferring the victim to medical care.
- **Eye Contact:** Rinse eyes with clean water for at least 15 minutes and seek medical attention.
- **Inhalation:** Move to fresh air, maintain breathing, and seek medical help.
- **Ingestion:** Rinse mouth, drink water, and do not induce vomiting unless directed by a physician.

Firefighting Measures:

For small fires, use dry chemical powder, carbon dioxide (**CO₂**), water spray, or alcohol-resistant foam. For large fires, use water spray or alcohol-resistant foam, applying sufficient amounts to cover the burning area.

Handling, Transportation, and Storage:

- Use automated or mechanical handling systems where possible.
- Store methanol in dry, cool, and well-ventilated areas away from heat sources and sparks.
- Keep containers tightly closed and made of compatible, insulated materials.

Personal Protection:

- Wear chemical-resistant work clothing, protective gloves, and safety goggles.
- Use respiratory protection when methanol vapor concentration in the air is high.

Environmental Effects:

- Entry into the environment may contaminate water, soil, and harm living organisms.
- Contact with the body may cause skin, eye, and respiratory irritation.

Waste and Disposal:

- Waste must be disposed of according to local regulations.
- Prevent release into sewage systems and water sources.

Main office: Homa building , Nafisi str, Tehran/Iran

Tel: +9890003050

Whatsapp: +989141032292

Email: tiz_aa@yahoo.com