

# METHYL ALCOHOL FACT SHEET

North Carolina Division of Public Health • Occupational and Environmental Epidemiology Branch

## Chemical Information

- 21<sup>st</sup> highest-volume chemical produced in the U.S.
- Clear and colorless liquid.
- Flammable, dangerous fire risk.
- Toxic by ingestion, inhalation and skin absorption.
- Used to manufacture formaldehyde and acetic acid; found in windshield wiper fluid, gas line antifreeze, fuels, solvents and carburetor cleaner.

## Hazards Identification

### **Acute Exposure:**

- May experience headache, dizziness, nausea, vomiting, abdominal pain, weakness, vertigo, and dermatitis.
- May also cause nervousness and shortness of breath.
- Can cause blurred vision, blindness, and changes in color perception, double vision, and general visual disturbances.
- The Environmental Protection Agency (EPA) Acute Exposure Guideline Level 1 (AEGL - 1) for methyl alcohol (methanol) is 270 ppm for an 8-hour period.

### **Chronic Exposure:**

- Can cause conjunctivitis, headache, gastric disturbances, bilateral blindness, kidney damage, irritant dermatitis, and numbness.

## Stability & Reactivity

- Reacts quickly with oxidizing materials.
- Reacts violently with acetyl bromide and beryllium hydride.
- Incompatible with strong oxidizers, mineral or organic acids and bases.

## Handling & Storage

- No smoking or open flame where stored, used or handled.
- Use explosion proof electrical equipment.
- Store in cool, dry, well-ventilated area.
- Store way from oxidizing materials, metals and mineral acids.

## **Glossary**

The Environmental Protection Agency (EPA) defines Acute Exposure Guideline Levels (AEGLs) as threshold exposure limits for the general public that are applicable to emergency exposure periods ranging from 10 minutes to 8 hours. The three AEGLs are defined as follows:

AEGL-1 – airborne concentration of a substance at which the general population could experience notable discomfort, irritation or certain asymptomatic non-sensory effects.

AEGL-2 – airborne concentration of a substance at which the general population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGL-3 – airborne concentration of a substance at which the general population could experience life threatening health effects or death.

