

## What is Methanol?

Methanol is a clear, colourless, volatile and flammable liquid. It has a slight alcohol odour. Detection of odour is an indication of overexposure.

## Safe Handling Practices

While methanol does have risks associated with it, they can be managed. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. To minimize the effect(s) on people, the environment, or the community:

- Wear methanol-resistant protective gloves, protective clothing, eye protection, and face protection.
- Wash hands thoroughly after handling.
- Keep away from heat, sparks, open flames, hot surfaces, and other ignition sources. No smoking.
- Keep container tightly closed.
- Use metal drums or glass containers that are bonded and grounded. Do not use plastic.
- Contents of drums and small containers should be stated. Clearly label all containers.
- Use explosion-proof electrical, ventilating, and lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe fumes/mist/vapours/spray.
- Do not eat, drink, or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Use appropriate breathing apparatus for protecting against methanol vapours.
- When handling indoors, both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of explosive mixtures.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up. Secure storage facilities with perimeter fencing.
- Have firefighting systems immediately available.



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Our commitment to sustainability.

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Scan the QR codes for more information on safe handling of methanol:



methanex.com



methanol.org

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## Dangerous Goods Classification



**Class 3:**  
Flammable  
Liquids



**Class 6.1**  
(secondary class):  
Poison inhalation hazard



Highly flammable  
liquid and vapour



Causes damage to  
organs; May damage  
fertility or unborn child



Toxic if swallowed,  
in contact with  
skin, or if inhaled



Causes serious eye  
irritation; May cause  
drowsiness or dizziness

**Packing Group:**  
II - Medium danger

**UN Number:**  
1230

**NFPA 704:**



# What is Methanol?

## Safe Handling Information



*Disclaimer: The implementation of the information contained herein is at the discretion of the individual. Please check with your local regulatory authority for further advice and safety requirements.*

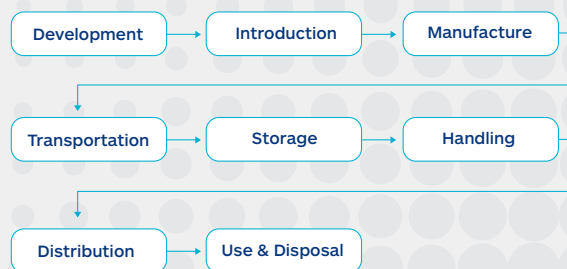
Methanex Corporation is the world's largest producer and supplier of methanol.

# Responsible Care® made simple

At Methanex we adhere to the highest principles of health, safety, environmental stewardship and social responsibility. We care deeply about the people and the environment in which we live, work and play and we believe our business should have a positive impact on people's lives. We choose to act responsibly in everything we do and wherever we do business. The well-being of our stakeholders is a key priority.

Responsible Care® is the foundation of everything we do and a key element of our global culture. The Responsible Care® Ethic and Principles for Sustainability is a United Nations recognized sustainability initiative adopted by the global chemical industry to enhance community safety, employee health and safety, environmental protection, product stewardship and social responsibility.

Although there are hazards associated with methanol, they can be managed to minimize potential risks to people and the environment during the life cycle of methanol, which includes:



Methanol is a basic chemical building block for other products such as acetic acid and formaldehyde. It is used in numerous applications including plastics, paints, glues and pharmaceuticals. Methanol is also being used increasingly in other applications, such as wastewater denitrification, biodiesel, gasoline blends, fuel cells, and as a marine fuel.

## Effects of Methanol on Health

### SHORT-TERM EFFECTS

**Swallowing** even small amounts of methanol can cause:

- Nausea
- Headache
- Abdominal pain
- Visual disturbances or blindness
- Possibly death

**Inhalation** can cause:

- Headaches
- Sleepiness
- Nausea
- Confusion
- Digestive and visual disturbances
- Loss of consciousness

### LONG-TERM EFFECTS

**Repeated exposure** by inhalation or absorption can cause:

- Systemic poisoning
- Brain disorders
- Impaired vision and blindness

*Provide good ventilation in process area to prevent formation of vapour. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear a positive pressure full face self-contained breathing apparatus or a full face supplied air respirator.*

## First Aid

Emergency safety shower and eye wash station should be available in the immediate vicinity of any potential exposure. In all cases of exposure, seek medical attention.

### Inhalation

- Move person to location with fresh air
- Restore or assist breathing

### Skin Exposure

- Remove contaminated clothing
- Wash exposed skin with large amounts of running water

### Eye Exposure

- Flush immediately with gently running water for a minimum of 15 minutes

### Ingestion

- Immediately call local Poison Control Centre or a doctor
- DO NOT induce vomiting
- Symptoms may be delayed 18–24 hours

## Fire Extinguishing Methods & Dangers

Methanol burns with a clear flame and without smoke, so it is difficult to see in daylight. Methanol diluted with water will still burn at five parts of water to one part of methanol.

### EXTINGUISH WITH:

- Water spray—diluting to greater than five parts water to one part methanol
- Foam—alcohol resistant fire fighting foam (AR-AFFF)
- Dry powder extinguisher

### BYPRODUCTS OF METHANOL COMBUSTION:

- Mostly carbon dioxide and water
- May contain formaldehyde and carbon monoxide

## Environmental Considerations

- Methanol is biodegradable in low concentrations.
- Methanol is soluble in water.
- Do not dispose of methanol in the environment.
- Confine impact to the immediate area of release.
- There can be an adverse effect on aquatic life, if the release is large enough.
- Contain the release, dispose of methanol safely.
- Stay upwind of a release or fire.
- Evacuate the area where the atmosphere is above acceptable limits, i.e., 200 ppm methanol in air, or if you can smell a faint odour of alcohol.
- It is recommended to use fluorine free firefighting foam. If foam is not fluorine free, the foam-methanol solution needs to be contained and disposed of properly.

For more information, please visit [www.methanex.com](http://www.methanex.com)