

# Isopropanol

## Summary:

Exposure to isopropanol (isopropyl alcohol) occurs through breathing it in the workplace air, and/or contact with the skin. Overexposure to isopropanol can cause headache, drowsiness, confusion, loss of coordination, unconsciousness and death. Isopropanol is on the Hazardous Substance List because it is regulated by OSHA and cited by ACGIH, DOT, NIOSH, DEP, EPA and NFPA. It is also on the Special Health Hazard Substance List because it is flammable.



## Your Right to Know

### Exposure Risks

The acute (short-term) health effects of Isopropanol (isopropyl alcohol) could irritate and burn the skin and eyes. Breathing the fumes can irritate the nose and throat. The chronic (long-term) health effects when handling the chemical include itching, redness, rash, drying, and cracking. This chemical has not been adequately evaluated to determine whether brain or other nerve damage could occur with repeated exposure. However, many solvents and other petroleum-based chemicals have shown to cause such damage. Effects may include reduced memory and concentration, personality changes (withdrawal, irritability), fatigue, sleep disturbances, reduced coordination, and/or effects on nerves supplying internal organs (autonomic nerves) and/or nerves to the

arms and legs (weakness). Isopropanol may affect the brain and kidneys. All contact with this chemical should be reduced to the lowest possible level. The OSHA permissible exposure limit of 400 ppm exposure limit is for air levels only. When skin contact also occurs, you may be overexposed, even though air levels are less than the OSHA permissible limit.

There is no evidence at this time that isopropanol causes cancer in animals.

The odor threshold is 37 to 610 ppm.

*Exposure to hazardous substances should be routinely evaluated. This may include collecting personal and area air samples.*

### Do You Know Your Ethanol Exposure?

*Passive dosimeters are the most convenient way to monitor your environment!*

The Kem Medical VAPOR-TRAK® 8610 Alcohol monitor has been validated for the OSHA 8-hour TWA exposure limit of 400 ppm Isopropanol.

All VAPOR-TRAK® badges are:

- Accurate, with reproducible results
- Easy to Use
- Designed for personal and area monitoring
- Full validation studies available
- Email Notification
- Technical Assistance
- Pre-paid return postage and laboratory analysis inclusive

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# Ethanol

## Summary:

*Exposure to ethanol (ethyl alcohol) occurs through breathing it in the workplace air, and/or contact with the skin. Repeated exposure to ethanol may cause spontaneous abortions, as well as birth defects and other developmental problems. Ethanol is on the Hazardous Substance List because it is regulated by OSHA and cited by ACGIH, DOT, NIOSH, and NFPA. List cited identified by the EPA. It is also on the Special Health Hazard Substance List because it is flammable.*

## Your Right to Know

### Exposure Risks

Ethanol (ethyl alcohol) may cause mutations (genetic changes). Handle with extreme care. High concentrations may damage the fetus. All contact with this chemical should be reduced to the lowest possible level. The OSHA permissible exposure limit of 1,000 ppm exposure limit is for air levels only. When skin contact also occurs, you may be overexposed, even though air levels are less than the OSHA permissible limit.

Breathing ethanol can irritate the lungs causing coughing and/or shortness of breath

Exposure can cause headache, nausea, a feeling of heat, and drowsiness. Higher exposure can cause unconsciousness. Repeated high exposure may affect the liver and the nervous system.

Avoid skin contact with ethanol. Wear proper protective equipment.

Exposure can affect the eyes, nose, mouth, and throat. Ethanol can irritate the skin. Repeated contact can dry the skin with cracking, peeling, and itching.

For those with frequent or potentially high exposure (half the PEL or greater, or significant skin contact) liver function tests and analysis of blood, urine, and exhaled breath for ethanol are recommended.

*Exposure to hazardous substances should be routinely evaluated. This may include collecting personal and area air samples.*

### Do You Know Your Ethanol Exposure?

*Passive dosimeters are the most convenient way to monitor your environment!*

The *Kem Medical VAPOR-TRAK*<sup>®</sup> 8610 ethanol monitor has been validated for the OSHA 8-hour TWA exposure limit of 1000 ppm.

All VAPOR-TRAK<sup>®</sup> badges are:

- Accurate, with reproducible results
- Easy to Use
- Designed for personal and area monitoring
- Full validation studies available
- Phone Notification of High Results
- Technical Assistance
- Pre-paid return postage and laboratory analysis inclusive



# Methanol

## Summary:

Methanol should be handled as a teratogen with extreme caution. Exposure to Methanol (methyl alcohol) occurs through breathing it in the workplace air, and/or contact with the skin. Methanol may damage the liver and nervous system. Methanol is on the Hazardous Substance List because it is regulated by OSHA and cited by ACGIH, DOT, NIOSH, DEP, HHAG, EPA and NFPA. It is also on the Special Health Hazard Substance List because it is a teratogen and is flammable.



## Your Right to Know

### Exposure Risks

The acute (short-term) health effects to Methanol (methyl alcohol) could irritate the skin. Methanol can irritate the eyes and cause blurred vision and/or blindness. Breathing the fumes can irritate the nose, mouth, and throat causing coughing and wheezing. Exposure to high concentrations can cause headache, nausea, vomiting, and dizziness. It can cause death. The chronic (long-term) health effects when handling the chemical include drying and cracking. This chemical may damage the liver and nervous system. All contact with this chemical should be reduced to the lowest possible level. The OSHA permissible exposure limit of 200 ppm exposure limit is for air levels only.

When skin contact also occurs, you may be overexposed, even though air levels are less than the OSHA permissible limit.

There is no evidence at this time that methanol causes cancer in animals.

Methanol may be a teratogen in humans since it has been shown to be a teratogen in animals.

The odor threshold is 160 ppm.

Caution should be used in relying on odor alone as a warning of potentially hazardous exposures.

*Exposure to hazardous substances should be routinely evaluated. This may include collecting*

### Do You Know Your Ethanol Exposure?

*Passive dosimeters are the most convenient way to monitor your environment!*

The *Kem Medical VAPOR-TRAK® 8610* Alcohol monitor has been validated for the OSHA 8-hour TWA exposure limit of 200 ppm Methanol.

All VAPOR-TRAK® badges are:

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