



Xylene

General information

Key Points

- Exposure by any route may be dangerous
- Chemical classification: harmful
- Inhalation causes irritation to the nose, throat and lungs
- Ingestion causes irritation of the mouth and throat
- Severe inhalation or ingestion exposure can cause dizziness, headache, confusion, heart problems, liver and kidney damage and coma.
- Irritating to the skin and eyes

Background

Xylene is a colourless, flammable liquid with a sweet odour that exists in three forms; *meta*-xylene, *ortho*-xylene and *para*-xylene. The three different forms are known as isomers.

Xylene occurs naturally in petroleum and crude oil. The majority of commercial xylene is manufactured from petroleum.



Xylene is blended into petrol and is used as a solvent in products such as paints and inks. It is also used as a chemical intermediate in the production of other industrial chemicals and in the rubber, plastics and leather industries.

Xylene is mainly released into the environment from industrial sites, motor vehicle exhausts and when it is used as a solvent. The majority of xylene released enters the air. It may also be released into water or soil following oil or petrol spillages.

For the general population, exposure to xylene can occur from cigarette smoke and vehicle exhaust emissions. People may also breathe in small amounts when using household products that contain xylene, such as paints and adhesives. Skin contact with these products may also lead to exposure at very low levels.

Exposure to xylene mainly occurs in the workplace although safe levels are enforced to protect the employees. Such levels are below those that are thought to cause harmful effects.

If exposed to xylene, the potential adverse health effects that may occur depend on the way people are exposed and the amount to which they are exposed.

Breathing in xylene vapours can cause irritation to the nose, throat and lungs. Ingesting xylene can cause irritation to the mouth and throat.



Xylene can be absorbed into the body via ingestion or inhalation and may cause symptoms such as stomach upset, dizziness, headache, confusion, heart problems, liver and kidney damage and coma.

Skin contact with xylene will cause irritation and redness of the skin. Repeated contact may cause dryness, cracking and blistering. Eye contact can cause irritation, inflammation and twitching of the eyelid.

Children are expected to show similar sensitivity as adults. It is not known if exposure to xylene during pregnancy can affect the health of the unborn child.

Due to inadequate data, the International Agency for Research on Cancer (IARC) determined that it is not known whether xylene causes cancer so considered it as not being classifiable.

Frequently Asked Questions

What is xylene?

Xylene is a colourless, flammable liquid with a sweet odour. It exists in three forms; *meta*-xylene, *ortho*-xylene and *para*-xylene. Xylene occurs naturally in crude oil and petroleum and is man-made. It is used as a solvent in paints and inks and is used in various industries such as the rubber, plastics and leather industries.

How does xylene get into the environment?

Xylene is released into the environment from industrial sources, vehicle exhausts, when it is used as a solvent and following oil or petrol spillages.

How will I be exposed to xylene?

Exposure to xylene can occur from vehicle emissions and cigarette smoking. The general population may be exposed to small amounts of xylene due to its use in household products such as paints and adhesives. Exposure can also occur in the workplace where xylene is produced or used as an industrial solvent.

If there is xylene in the environment will I have any adverse health effects?

The presence of xylene in the environment does not always lead to exposure. Clearly, in order for it to cause any adverse health effects you must come into contact with it. You may be exposed by breathing, eating, or drinking the substance or by skin contact. Following exposure to any chemical, the adverse health effects you may encounter depend on several factors, including the amount to which you are exposed (dose), the way you are exposed, the duration of exposure, the form of the chemical and if you were exposed to any other chemicals.

Breathing in xylene vapours causes irritation to the nose throat and lungs. Ingestion of xylene can cause irritation to the mouth and throat. Xylene can be absorbed into the body following inhalation or ingestion. Symptoms include dizziness, headache, confusion, heart problems, liver and kidney damage and coma.

Skin contact with xylene causes irritation and redness of the skin. Eye contact may cause irritation, inflammation and twitching of the eyelid.

Can xylene cause cancer?

Due to the lack of human data and the limited data in animals, the International Agency for Research on Cancer (IARC) determined that it is not known whether xylene causes cancer so considered it as not being classifiable.

Does xylene affect children or damage the unborn child?

Due to the lack of adequate human data it is not possible to assess the reproductive and developmental effects of xylene.

What should I do if I am exposed to xylene?

You should remove yourself from the source of exposure.

XYLENE – GENERAL INFORMATION

If you have got xylene on your skin remove soiled clothing, wash the affected area with lukewarm water and soap for at least 10 – 15 minutes and seek medical advice.

If you have got xylene in your eyes remove contact lenses, wash the affected area with lukewarm water for at least 10 – 15 minutes and seek medical advice.

If you have inhaled or ingested xylene seek medical advice.

This document will be reviewed not later than 3 years or sooner if substantive evidence becomes available.