What is 2-butanone?

2-Butanone is an industrial chemical. 2-Butanone is also called methyl ethyl ketone. It can also be present in the environment from natural sources. It is made by some trees and found naturally in some fruits and vegetables in small amounts.

2-Butanone is used in a number of industrial products such as paints and other coatings. It is also used in glues and as a cleaning agent.

How can I be exposed to 2-butanone?

You can be exposed to 2-butanone from food that naturally has a small amount of 2-butanone, or from contaminated drinking water. If you use paints, glues, coatings, or cleaning agents containing 2-butanone, you can be exposed from contaminated air or from skin contact with these products.

If you live near a facility where 2-butanone is produced or a facility that uses 2-butanone products, you can be exposed to low levels by breathing contaminated air.

How can 2-butanone affect my health?

Studies in humans breathing 2-butanone found nose, throat, and eye irritation. Other health effects seen in people breathing 2-butanone include headache, tiredness, and feeling of drunk.

Poor coordination has been found in lab animals exposed to high concentrations of 2-butanone. Kidney effects have been seen in lab animals that breathe 2-butanone or are orally exposed to it.

Serious health effects in animals have been seen only at very high levels. When breathed, these effects included birth defects, loss of consciousness, and death.

The levels of 2-butanone typically found in the environment are lower than levels known to cause harmful health effects.
Can 2-butanone cause cancer?

Three of four human studies did not find an increase in cancer; the fourth study did find an increase in childhood leukemia. In all of these studies, the individuals were exposed to a number of different chemicals. No animal studies were found that examined whether 2-butanone can cause cancer.

The Environmental Protection Agency (EPA) concluded that the data are inadequate for an assessment of human carcinogenic potential (cause cancer) of 2-butanone.

Can I get a medical test to check for 2-butanone?

Tests are available to measure levels of 2-butanone in blood, breath, and urine. Some of the chemicals that are formed when 2-butanone breaks down in the body can also be measured in the urine. These tests can show if you were exposed to 2-butanone and whether you were exposed to high levels, but these tests won’t predict if you will have health problems. These tests are not usually done in the doctor’s office as part of a routine medical exam. However, a sample taken in the doctor’s office can be sent to a special laboratory. If you think you have had an exposure to 2-butanone, call your doctor, nurse, or poison control center.

How can I protect myself and my family from 2-butanone?

Workers involved in the production or use of 2-butanone should protect themselves to limit inhalation (breathing) and dermal (skin) exposure to it. Check for OSHA guidance about PPE (personal protective equipment) at http://www.osha.gov/SLTC/personalprotectiveequipment/.

People living near facilities that produce or use 2-butanone or areas where it is stored could be at greater risk of exposure than the general population.

For more information:

Call CDC-INFO at 1-800-232-4636, or submit your question online at https://www.cdc.gov/dcs/ContactUs/Form

Go to ATSDR’s Toxicological Profile for 2-butanone: https://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=343&tid=60


Find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html