BIS (2-CHLOROETHYL) ETHER (BCEE)

What is BIS (2-CHLOROETHYL) ETHER (BCEE)?

Bis (2-chloroethyl) ether (BCEE) is a clear man-made liquid with a strong, fruity smell.

Where can BCEE be found and how is it used?

BCEE is made by industry and used as a solvent. Solvents help dissolve other substances. BCEE is used to make pesticides and other chemicals.

How can people be exposed to BCEE?

You could be exposed to BCEE through:

Breathing BCEE vapor if you work where BCEE is used or made.

Touching it if you work where BCEE is used or made.

Drinking water that contains BCEE. Low levels of BCEE are found in drinking water supplies in many parts of the United States. Higher levels are found in groundwater near waste sites.

How does BCEE work and how can it affect my health?

Short-term exposure to BCEE irritates the nose, throat, lungs, eyes and skin. Repeated exposure to high levels may permanently damage lungs. BCEE levels in drinking water are usually far too low to cause immediate health effects but long-term exposure to low levels in drinking water can cause cancer. BCEE is named as a probable cancer-causing substance.

How is BCEE poisoning treated?

There is no treatment for BCEE. A doctor will treat the symptoms. In all cases of poisoning, medical treatment should be sought and a doctor may prescribe a different treatment depending on circumstances of the poisoning and the symptoms.

What should I do if exposed to BCEE?

Anyone who may have been exposed to high levels of BCEE should be removed from the source of exposure immediately. Clothing that contacted BCEE should be removed and discarded. Skin and eyes contaminated with BCEE should be flushed with clean water. Seek medical attention immediately.

What factors limit use or exposure to BCEE?

Workers should use BCEE in a regulated, enclosed area with local exhaust ventilation. If venting is unavailable, workers should wear respirators. All workers should wear protective work clothing. The area should be marked as a site where BCEE is handled, used, stored or formed. Hazard and warning information should be posted. In the case of a chemical release, workers should wash thoroughly immediately after exposure and at the end of the work shift. Communicate all health and safety information to potentially exposed workers before releases occur.

Is there a medical test to show whether I've been exposed to BCEE?

Tests can detect BCEE in some animal tissues and in environmental samples, but these tests cannot measure BCEE in people.

24/7 Emergency Contact Number: 1-888-295-5156

DELAWARE HEALTH
AND SOCIAL SERVICES
Division of Public Health

Technical information for BCEE

CAS Number: 111-44-4

Chemical Formula: $C_4H_8Cl_2O$

Carcinogenicity (EPA): B2–Probable human carcinogen.

MCL (Drinking Water): Not available

OSHA Standards: 15 ppm (90 mg/m^3); not to be exceeded at any time.

NIOSH Standards: 5 ppm (30 mg/m^3) and 10 ppm, not to be exceeded during any 15 minute work period.

References and Sources

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