

CUMENE

Material Safety Data Sheet

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PRODUCT IDENTIFICATION:

Synonyms: Benzene, (1-methylethyl)-; cumene 99%; cumol

Formula CAS No.: 98-82-8

Molecular Weight: 120.20

Hazardous Ingredients: Cumene.

Chemical Formula: C9H12

PRECAUTIONARY MEASURES

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES, AND UPPER RESPIRATORY TRACT. COMBUSTIBLE. AFFECTS CENTRAL NERVOUS SYSTEM.

Do not breathe vapor.

Avoid contact with eyes, skin and clothing.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

Keep away from heat, sparks and flame.

EMERGENCY FIRST AID

If swallowed, call a physician immediately. If swallowed, DO NOT INDUCE VOMITING! Aspiration hazard. Call a physician immediately. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes.
SEE SECTION 5.

Physical Data

SECTION 1

Appearance: Colorless liquid

Odor: Sharp penetrating aromatic odor.

Solubility: Insoluble in water.

Boiling Point: 152-154 C (306-309 F)

Vapor Density (Air=1): 4.1

Melting Point: -96 C (-141 F)

Vapor Pressure (mm Hg): 10 @ 383 C

Specific Gravity: 0.864

Evaporation Rate: Very low

NFPA Ratings: Health: 2 Flammability: 3 Reactivity: 0

Fire and Explosion

SECTION 2

Information

Fire:

Combustible Liquid. Flashpoint: 44 C (111 F). (closed cup). Autoignition temperature: 425 C (797 F). Flammable limits in air, % by volume: lel: 0.9; uel: 6.5

Explosion:

Above flash point, vapor-air mixtures are explosive within flammable limits noted above.

Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Reactivity Data

SECTION 3

Stability:-----
Stable under ordinary conditions of use and storage.Hazardous Decomposition
Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong oxidizers.

Leak/Spill Disposal Information

SECTION 4

Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Contain and recover liquid when possible. Collect as hazardous waste and atomize in a suitable RCRA approved combustion chamber, or absorb with vermiculite, dry sand, earth or similar material for disposal as hazardous waste in a RCRA approved facility. Do not flush to sewer!
Reportable Quantity (RQ) (CWA/CERCLA) : 5000 lbs.
Ensure compliance with local, state and federal regulations.

Health Hazard Information

SECTION 5

A. Exposure/Health Effects

Inhalation: Vapors or mist irritates the mucous membranes and upper respiratory tract. Affects the central nervous system; symptoms may include dizziness, drowsiness, slight incoordination and unconsciousness.

Ingestion: Swallowing can cause symptoms of sore throat, coughing, abdominal pain, and vomiting. Central nervous system effects may occur; see inhalation. Swallowing may cause droplets to enter the lungs (aspiration) with the risk of pneumonia.

Skin Contact: May cause skin irritation with redness. Skin absorption can occur; absorption through the skin proceeds slowly.

Eye Contact: Vapor or mist irritates the eyes.

Chronic Exposure: Prolonged or repeated exposure may cause skin rash. Damage to the lungs, liver, and kidneys may occur.

Aggravation of

Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of the substance.
The use of alcoholic beverages enhances the toxic effects.

B. FIRST AID

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: If swallowed, DO NOT INDUCE VOMITING! Aspiration hazard. Call a physician immediately.

Skin Exposure: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Eye Exposure: Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

C. TOXICITY (RTECS, 1986)

Oral rat LD50: 1400 mg/Kg Skin rabbit LD50: 12300 mg/Kg Inhalation rat LC50: 8000 ppm/4H

Occupational Control Measures SECTION 6

Airborne Exposure Limits: -OSHA Permissible Exposure Limit (PEL): 50 ppm (TWA) skin -ACGIH Threshold Limit Value (TLV): 50 ppm (TWA) skin

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators (NIOSH Approved) If the TLV is exceeded a full facepiece chemical cartridge respirator may be worn, in general, up to 100 times the TLV or the maximum use concentration specified by the respirator supplier, whichever is less. Alternatively, a supplied air full facepiece respirator or airlined hood may be worn.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

Storage and Special Information SECTION 7

Protect against physical damage. Outside or detached storage is preferred. Inside storage should be in a standard flammable liquids storage room or cabinet. Separate from oxidizing materials. Storage and use areas should be No Smoking areas.

Mallinckrodt provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Individuals receiving the information must exercise their independent judgment in determining its

