

Material Safety Data Sheet

Cumene

MSDS# 02169

Section 1 - Chemical Product and Company Identification

MSDS Name: Cumene

Catalog

AC110630000, AC110630010, AC110630025, AC181010000, AC181010010, AC181010025

Numbers: A

AC181010025, AC181010050, AC329730000, AC329730050, AC329735000

Synonyms:

Isopropylbenzene; Benzene, 1-methylethyl-; Cumol.

Company Identification:

Acros Organics BVBA
Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

Company Identification: (USA)

Acros Organics
One Reagent Lane

Fair Lawn, NJ 07410

For information in the US, call:

800-ACROS-01

For information in Europe, call:

+32 14 57 52 11

Emergency Number, Europe:

+32 14 57 52 99

Emergency Number US:

201-796-7100

CHEMTREC Phone Number, US:

800-424-9300

CHEMTREC Phone Number, Europe:

703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#:

98-82-8

Chemical Name:

Cumene

%:

>98

EINECS#:

202-704-5

Hazard Symbols:

XN N





Risk Phrases:

10 37 51/53 65

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable liquid and vapor. May cause central nervous system depression. Aspiration hazard if swallowed. Can enter lungs and cause damage. May form explosive peroxides. This material has been reported to be susceptible to autoxidation and therefore should be classified as peroxidizable. Causes eye, skin, and respiratory tract irritation. Target Organs: Central nervous system, lungs, eyes, skin.

Potential Health Effects

Eye:

Causes eye irritation. May cause conjunctivitis.

Causes skin irritation. Exposure may cause irritation characterized by redness, dryness, and inflammation. Not

Skin:

expected to cause an allergic skin reaction. A single prolonged skin exposure is not likely to result in the material

being absorbed in harmful amounts.

Ingestion:

Aspiration hazard. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

May be harmful if swallowed. May cause central nervous system depression.

Inhalation: Causes respiratory tract irritation. May cause narcotic effects in high concentration.

Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation may cause effects similar to those of acute inhalation. Repeated exposure may cause damage to the spleen. Prolonged exposure can injure liver,

kidneys and lungs.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid Skin:

if irritation develops and persists. Wash clothing before reuse.

Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs

naturally, have victim lean forward.

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical aid.

Notes to

General

Information:

Extinguishing

Media:

Inhalation:

Ingestion:

Chronic:

Treat symptomatically and supportively.

Physician:

Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Flammable liquid

and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can

spread along the ground and collect in low or confined areas. May accumulate static electricity.

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Water may be

ineffective. This material is lighter than water and insoluble in water. The fire could easily be spread by the use of water in an area where the water cannot be contained. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use straight streams of water.

Autoignition 420 deg C (788.00 deg F) Temperature:

Flash Point: 31 deg C (87.80 deg F)

Explosion 0.9 vol % Limits: Lower:

Explosion 6.5 vol % Limits: Upper:

NFPA Rating: health: 2; flammability: 3; instability: 1;

Section 6 - Accidental Release Measures

General

Spills/Leaks:

Storage:

Use proper personal protective equipment as indicated in Section 8. Information:

> Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce

vapors.

Section 7 - Handling and Storage

Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and Handling: can be dangerous. Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor or mist.

Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Containers should be dated when opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals. Isolate from oxidizing materials and acids. All peroxidizable substances should be stored away from heat and light and be protected from ignition sources.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	H	OSHA - Final PELs
Cumene	 50 ppm 	= =	 50 ppm TWA; 245 mg/m3 TWA
+		 	++

OSHA Vacated PELs: Cumene: 50 ppm TWA; 245 mg/m3 TWA

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Personal Protective Equipment

Eyes:

Wear chemical splash goggles.

Skin:

Use polyvinyl alcohol or fluorocarbon rubber (viton) gloves.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or

European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: clear, colorless

Odor: Sharp aromatic odor

pH: Not available

Vapor Pressure: 8 mm Hg @ 20 deg C

Vapor Density: 4.1 (Air=1)

Evaporation Rate: Not available

Viscosity: 0.79 mPas 20 deg C

Boiling Point: 152 - 154 deg C @ 760 mm Hg

Freezing/Melting Point: -96 deg C (-140.80°F)

Decomposition Temperature: Not available

Solubility in water: Insoluble

Specific Gravity/Density: .8600g/cm3 Molecular Formula: C9H12

Molecular Weight: 120.19

Section 10 - Stability and Reactivity

Chemical Stability:

Under normal storage conditions, peroxidizable compounds can form and accumulate peroxides which may explode when subjected to heat or shock. This material is most hazardous when

peroxide levels are concentrated by distillation or evaporation.

Conditions to Avoid:

Ignition sources, excess heat, prolonged exposure to air.

Incompatibilities with

Other Materials

Oxidizing agents, nitric acid, nitrites, sulfuric acid, chlorosulfonic acid, oleum.

Hazardous

Decomposition

Carbon monoxide, carbon monoxide, carbon dioxide.

Products

Hazardous

Polymerization

Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 98-82-8: GR8575000

RTECS:

CAS# 98-82-8: Draize test, rabbit, eye: 86 mg Mild;

Draize test, rabbit, eye: 500 mg/24H Mild;

Draize test, rabbit, skin: 100 mg/24H Moderate;

Inhalation, mouse: LC50 = 10 gm/m3/7H; Inhalation, mouse: LC50 = 15300 mg/m3/2H;

LD50/LC50: Inhalation, mouse: LC50 = 10000 mg/m3/7H;

Inhalation, rat: LC50 = 39000 mg/m3/4H; Oral, mouse: LD50 = 12750 mg/kg; Oral, rat: LD50 = 1400 mg/kg; Oral, rat: LD50 = 2.9 gm/kg;

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Carcinogenicity: Cumene - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Skin, rabbit: LD50 = 12300 uL/kg;

Section 12 - Ecological Information

Water flea Daphnia: EC50 = 0.6 mg/L; 48Hr; Unspecified

Ecotoxicity: Bacteria: Phytobacterium phosphoreum: EC50 = 1.48 mg/L; 5,15,30 min; Microtox test

Fish: Fathead Minnow: LC50 = 6.32 mg/L; 96 Hr; Flow-through at 24.5 C (pH 7.58)

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: ISOPROPYLBENZENE

Hazard Class: 3 UN Number: UN1918 Packing Group: III Canada TDG

Shipping Name: Not available

Hazard Class: UN Number: Packing Group:

USA RQ: CAS# 98-82-8: 5000 lb final RQ; 2270 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 10 Flammable.

R 37 Irritating to respiratory system.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 65 Harmful: may cause lung damage if swallowed.

Safety Phrases:

S 24 Avoid contact with skin.

S 37 Wear suitable gloves.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

S 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

WGK (Water Danger/Protection)

CAS# 98-82-8: 1

Canada

CAS# 98-82-8 is listed on Canada's DSL List Canadian WHMIS Classifications: B2, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 98-82-8 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 98-82-8 is listed on the TSCA Inventory.

REVIEWED

Section 16 - Other Information

MSDS Creation Date: 1/31/2000 Revision #10 Date 7/20/2009 DATE: June 6/20/

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.