

ASHLAND
SAFETY DATA SHEET

Page: 1
Revision Date: 12/24/2008
Print Date: 12/30/2008
MSDS Number: R0402924
Version: 1.5

No dataA/C ODOR ELIMINATR

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	No data
Product code	A/C ODOR ELIMINATR
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: aerosol, clear

WARNING! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. CONTENTS UNDER PRESSURE. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Routes of exposure

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

No dataA/C ODOR ELIMINATR

Inhalation

Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidney, central nervous system, pancreas, heart, male reproductive system. Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Lung irritation, cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), muscle cramps, involuntary eye movement, low blood pressure, pain in the abdomen and lower back, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate), Blurred vision, shortness of breath, loss of coordination, confusion, irregular heartbeat, cyanosis (causes blue coloring of the skin and nails from lack of oxygen), anesthesia, lung edema (fluid buildup in the lung tissue), kidney damage, respiratory failure, coma

Target Organs

This product contains ethanol. Alcoholic beverage consumption has been associated with brain damage, heart damage, and pancreatitis in humans. The relevance of these findings to ethanol exposure in industrial environments is uncertain. Exposure to lethal concentrations of methanol has been shown to cause damage to organs including liver, kidneys, pancreas, heart, lungs and brain. Although this rarely occurs, survivors of severe intoxication may suffer from permanent neurological damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible kidney effects, pancreatic damage, liver damage, central nervous system damage, brain damage, testis damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: liver damage

No dataA/C ODOR ELIMINATR

Carcinogenicity

This product contains ethanol. The International Agency for Research on Cancer (IARC) has determined that exposure to ethanol through chronic human consumption of alcoholic beverages can cause cancer. The relevance of this finding to ethanol exposure in industrial environments is uncertain.

Reproductive hazard

This product contains ethanol. Alcoholic beverage consumption has been associated with birth defects in humans. The relevance of this finding to ethanol exposure in industrial environments is uncertain.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
ETHANOL	64-17-5	>=40-<50%
BUTANE NORMAL	106-97-8	>=15-<20%
ISOPROPANOL	67-63-0	>=5-<10%
PROPANE	74-98-6	>=5-<10%

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

No dataA/C ODOR ELIMINATR

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water mist, Carbon dioxide (CO₂), Dry chemical

Hazardous combustion products

May form: carbon dioxide and carbon monoxide, various hydrocarbons

Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. No flash to boiling point. This product contains halogenated solvents which inhibit flashing until the halogenated solvent has been evaporated away. The product may become combustible or flammable after this occurs. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes. Evacuate all personnel from emergency area. Immediately cool containers with water spray from a safe distance.

Flammability Class for Flammable Liquids

Flammable Liquid Class IA

6. ACCIDENTAL RELEASE MEASURES

No dataA/C ODOR ELIMINATR

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Same method as small spill. Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Ventilate area. Persons not wearing proper personal protective equipment should be excluded from area of spill.

Environmental precautions

No data

Methods for cleaning up

Allow to evaporate.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. Do not puncture or incinerate containers. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. There should be no sources of ignition in the storage or use area.

Storage

Do not store in temperatures above 120 degrees F. Do not store near extreme heat, open flame, or sources of ignition.

No data A/C ODOR ELIMINATR

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

ETHANOL		64-17-5
ACGIH	time weighted average	1,000 ppm
NIOSH	Recommended exposure limit (REL):	1,000 ppm
NIOSH	Recommended exposure limit (REL):	1,900 mg/m ³
OSHA Z1	Permissible exposure limit	1,000 ppm
OSHA Z1	Permissible exposure limit	1,900 mg/m ³
BUTANE NORMAL		106-97-8
NIOSH	Recommended exposure limit (REL):	800 ppm
NIOSH	Recommended exposure limit (REL):	1,900 mg/m ³
OSHA Z1A	time weighted average	800 ppm
OSHA Z1A	time weighted average	1,900 mg/m ³
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	800 ppm
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,900 mg/m ³
ISOPROPANOL		67-63-0
NIOSH	Recommended exposure limit (REL):	400 ppm
NIOSH	Recommended exposure limit (REL):	980 mg/m ³
NIOSH	Short term exposure limit	500 ppm
NIOSH	Short term exposure limit	1,225 mg/m ³
OSHA Z1	Permissible exposure limit	400 ppm
OSHA Z1	Permissible exposure limit	980 mg/m ³
ACGIH	time weighted average	200 ppm
ACGIH	Short term exposure limit	400 ppm
PROPANE		74-98-6
NIOSH	Recommended exposure limit (REL):	1,000 ppm

No dataA/C ODOR ELIMINATR

NIOSH	Recommended exposure limit (REL):	1,800 mg/m ³
OSHA Z1	Permissible exposure limit	1,000 ppm
OSHA Z1	Permissible exposure limit	1,800 mg/m ³
OSHA Z1A	time weighted average	1,000 ppm
OSHA Z1A	time weighted average	1,800 mg/m ³
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,000 ppm
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,800 mg/m ³
ACGIH	time weighted average	1,000 ppm

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Eye protection

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

Not normally required. However, wear resistant gloves such as nitrile rubber to prevent irritation which may result from prolonged or repeated skin contact with product. Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory protection

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators

No data/A/C ODOR ELIMINATR

(negative pressure type) under specified conditions (see your industrial hygienist).
Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	aerosol
Form	aerosol
Colour	clear
Odour	No data
Boiling point/boiling range	78.50 °C / 173.3 °F
pH	8.2
Flash point	55 °F / 13 °C
Evaporation rate	< 1 (Ethyl Ether)
Explosion limits	3.3 %(V) 19 %(V)
Vapour pressure	7,999.00 hPa @ 77 °F / 25 °C
Vapour density	(>) 1 (AIR=1)
Density	0.75 g/cm ³
Solubility	insoluble in water
Partition coefficient: n-octanol/water	No data
log Pow	no data available
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Heat, flames and sparks.

Incompatible products

Avoid contact with: acetaldehyde, acids, alkalis, amines, chlorinated solvents, Ethylene oxide, halogens, isocyanates, strong oxidizing agents, Zinc, Do not use with aluminum equipment at temperatures above 120 degrees F.

Hazardous decomposition products

carbon dioxide and carbon monoxide, various hydrocarbons

No data/A/C ODOR ELIMINATR

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

ETHANOL	LD 50 Rat: 7,060 mg/kg
BUTANE NORMAL	LD 50 Rat: > 5 g/kg
ISOPROPANOL	LD 50 Rat: 5,045 mg/kg
PROPANE	no data available

Acute inhalation toxicity

ETHANOL	LC 50 Rat: 20000 ppm, 10 h
BUTANE NORMAL	LC 50 Rat: 658 mg/l , 4 h
ISOPROPANOL	LC 50 Rat: 16000 ppm, 4 h
PROPANE	LC 50 Rat: > 12190 ppm, 4 h

Acute dermal toxicity

ETHANOL	LD Lo Rabbit: 20 g/kg
BUTANE NORMAL	LD 50 Rabbit: > 3.16 g/kg
ISOPROPANOL	LD 50 Rabbit: 5,030 - 7,900 mg/kg
PROPANE	no data available

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

No data A/C ODOR ELIMINATR

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

IMDG:

UN1950, AEROSOLS (ETHANOL, ISOPROPANOL) 2.1,

IATA_P:

UN1950, Aerosols, flammable (ETHANOL, ISOPROPANOL) 2.1,

IATA_C:

UN1950, Aerosols, flammable (ETHANOL, ISOPROPANOL) 2.1,

CFR_ROAD:

UN1950, Aerosols (ETHANOL, ISOPROPANOL) 2.1,

CFR_RAIL:

UN1950, Aerosols (ETHANOL, ISOPROPANOL) 2.1,

CFR_INWTR:

UN1950, Aerosols (ETHANOL, ISOPROPANOL) 2.1,

IMDG_ROAD:

UN1950, AEROSOLS (ETHANOL, ISOPROPANOL) 2.1,

IMDG_RAIL:

UN1950, AEROSOLS (ETHANOL, ISOPROPANOL) 2.1,

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer,

ASHLAND
SAFETY DATA SHEET

Page: 11
Revision Date: 12/24/2008
Print Date: 12/30/2008
MSDS Number: R0402924
Version: 1.5

No dataA/C ODOR ELIMINATR

birth, or any other reproductive defects.

SARA Hazard Classification Fire Hazard
 Acute Health Hazard
 Chronic Health Hazard

SARA 313 Component(s)

Reportable quantity - Components

ETHANOL	64-17-5	none
BUTANE NORMAL	106-97-8	none
ISOPROPANOL	67-63-0	none
PROPANE	74-98-6	none

	Health	Flammability	Reactivity	Other
HMIS	1	4	0	
NFPA	1	4	0	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).