

# ASHLAND SAFETY DATA SHEET

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Revision Date: 09/22/2008

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MSDS Number: R0004335

Version: 1.3

ACETONE 85456

## 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	ACETONE
Product code	85456
Product Use Description	No data

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Appearance: liquid,, colourless

DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF INHALED. MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

### 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, but it is unlikely that this would result in harmful effects during safe handling and use.

#### **Ingestion**

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Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

**Inhalation**

Breathing of vapor or mist is possible. 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), blood-forming system

**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), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, high blood sugar, coma

**Target Organs**

This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities

**Carcinogenicity**

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Components</b>	<b>CAS-No.</b>	<b>Concentration</b>
ACETONE	67-64-1	<=100%

**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**

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:** This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

**Treatment:** No information available.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Dry chemical, Carbon dioxide (CO<sub>2</sub>), Alcohol-resistant foam

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**Hazardous combustion products**  
carbon dioxide and carbon monoxide

**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. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters. 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.

**Flammability Class for Flammable Liquids**

Flammable Liquid Class IB

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

For personal protection see section 8. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

**Environmental precautions**

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

**Methods for cleaning up**

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

**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. 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.

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**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. Do not store near high heat or open flames.

### Storage

Keep containers closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

ACETONE		67-64-1
ACGIH	time weighted average	500 ppm
ACGIH	Short term exposure limit	750 ppm
NIOSH	Recommended exposure limit (REL):	250 ppm
NIOSH	Recommended exposure limit (REL):	590 mg/m <sup>3</sup>
OSHA Z1	Permissible exposure limit	1,000 ppm
OSHA Z1	Permissible exposure limit	2,400 mg/m <sup>3</sup>

### 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 exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

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**Skin and body protection**

Wear resistant gloves (consult your safety equipment supplier).

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**

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	liquid
<b>Form</b>	No data
<b>Colour</b>	colourless
<b>Odour</b>	fruity
<b>Boiling point/boiling range</b>	56.00 °C / 132.8 °F @ 101.32 kPa
<b>Melting point/range</b>	-138.6 °F / -94.8 °C
<b>pH</b>	No data
<b>Flash point</b>	-4 °F / -20 °C, Closed Cup
<b>Evaporation rate</b>	14.40 (N-Butyl Acetate)
<b>Explosion limits</b>	2.6 %(V) 12.8 %(V)
<b>Vapour pressure</b>	30.79 kPa @ 77 °F / 25 °C
<b>Vapour density</b>	2.000 (AIR=1)
<b>Density</b>	(+/- 0.01) 0.7865 g/cm <sup>3</sup> @ 77 °F / 25 °C 6.59 lb/gal @ 68 °F / 20 °C
<b>Solubility</b>	soluble in water
<b>Partition coefficient: n-octanol/water</b>	No data
<b>log Pow</b>	-0.24
<b>Autoignition temperature</b>	869 °F / 465 °C

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**10. STABILITY AND REACTIVITY****Stability**

Stable.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible products**

Avoid contact with: Acids, alkalis, Reducing agents, Strong oxidizing agents

**Hazardous decomposition products**

carbon dioxide and carbon monoxide

**Hazardous reactions**

Product will not undergo hazardous polymerization.

**Thermal decomposition**

No data

**11. TOXICOLOGICAL INFORMATION****Acute oral toxicity**

ACETONE

LD 50 Rat: 5,800 mg/kg

**Acute inhalation toxicity**

ACETONE

LC 50 Rat: &gt; 16000 ppm, 4 h

**Acute dermal toxicity**

ACETONE

LD 50 Rabbit: &gt; 20,000 mg/kg

**12. ECOLOGICAL INFORMATION****Aquatic toxicity****Acute and Prolonged Toxicity to Fish**96 h LC 50 Fathead minnow (*Pimephales promelas*), : 8,733 - 9,482 mg/l  
Mortality

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96 h LC 50 Bluegill (*Lepomis macrochirus*), : 8,300 mg/l

Mortality

96 h LC 50 Rainbow trout, donaldson trout (*Oncorhynchus mykiss*), : 4,740 - 6,330 mg/l

Mortality

**Acute Toxicity to Aquatic Invertebrates**

No data

**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:**

UN1090, ACETONE 3, II

**IATA\_P:**

UN1090, Acetone 3, II

**IATA\_C:**

UN1090, Acetone 3, II

**CFR\_ROAD:**

UN1090, Acetone 3, II

**CFR\_RAIL:**

UN1090, Acetone 3, II

**CFR\_INWTR:**

UN1090, Acetone 3, II

**IMDG\_ROAD:**

UN1090, ACETONE 3, II

**IMDG\_RAIL:**

UN1090, ACETONE 3, II



