

## Acetone

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Acetone

**Synonyms/Generic Names:** Dimethyl Ketone; Ketone Propane; 2-Propanone

**SDS Number:** 6.00

**Product Use:** For Educational Use Only

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information Contact:** Ward's Science  
5100 West Henrietta Rd.  
PO Box 92912-9012  
Rochester, NY 14692  
(800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** Flammable liquid, Target organ effect, Irritant

**Target Organs:** Liver, Kidney, Eyes, Skin, Respiratory system, Central nervous system.

**Signal Words:** Danger

**Pictograms:**



**GHS Classification:**

Flammable liquids	Category 2
Skin irritation	Category 3
Eye irritation	Category 2A
Specific target organ toxicity – single exposure	Category 3

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

H225	Highly flammable liquid and vapor.
H316	Causes mild skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

**Precautionary Statements:**

P210	Keep away from heat/sparks/open flames/hot surfaces.- No smoking.
P261	Avoid breathing dust/fumes/gas/mist/vapors/spray
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**Potential Health Effects**

<b>Eyes</b>	Causes eye irritation.
<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness or dizziness. Can cause irritation of mucous membranes and central nervous system depression.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Ingestion</b>	May be harmful if swallowed.

**NFPA Ratings**

<b>Health</b>	2
<b>Flammability</b>	3
<b>Reactivity</b>	0
<b>Specific hazard</b>	Not Available

**HMIS Ratings**

<b>Health</b>	2
<b>Fire</b>	3
<b>Reactivity</b>	0
<b>Personal</b>	H

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Acetone	>99	67-64-1	200-662-2	C <sub>3</sub> H <sub>6</sub> O	58.08 g/mol

**4. FIRST-AID MEASURES**

<b>Eyes</b>	Rinse with plenty of water for at least 15 minutes and seek medical attention.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
<b>Skin</b>	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

**5. FIREFIGHTING MEASURES**

<b>Suitable (and unsuitable) extinguishing media</b>	Product is flammable. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide when fighting fires involving this material. Cool containers with water.
<b>Special protective equipment and precautions for firefighters</b>	Wear self contained breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. Emits toxic fumes (carbon oxides) under fire conditions. (See also Stability and Reactivity section). Vapors can travel to a source of ignition and flash back. Containers may explode in a fire. Cool containers from a distance using water spray. SENSITIVE TO STATIC DISCHARGE.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	Cleanup personnel need personal protection from inhalation and skin/eye contact. Evacuate and ventilate the area. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with local regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation and grounding. Wash thoroughly after using. Keep container closed when not in use. Avoid contact with skin and eyes. Avoid inhalation. Use explosion-proof equipment. Keep away from sources of ignition. No smoking. Take measure to prevent the buildup of electrostatic charge.

### Conditions for safe storage, including any incompatibilities

Store in tightly closed, original containers in a cool, dry, well ventilated area. Store between 55-100°F for product stability. Do not store with strong oxidizing agents, strong bases, reducing agents, phosphorus oxychloride.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational Exposure Controls:** Ventilation and appropriate grounding of containers.

Component	Exposure Limits	Basis	Entity
Acetone	2400 mg/m <sup>3</sup>	PEL	OSHA
	1188 mg/m <sup>3</sup>	TLV	ACGIH
	590 mg/m <sup>3</sup>	REL	NIOSH
	2500 ppm	IDLH	OSHA

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

### Personal Protection

<b>Eyes</b>	Wear chemical safety glasses or goggles.
<b>Inhalation</b>	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
<b>Skin</b>	Wear nitrile or rubber gloves, apron or lab coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Other</b>	Not Available

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance (physical state, color, etc.)	Clear, colorless liquid
Odor	Mild alcohol. Fruity. Mint-like. Fragrant.
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	-94°C (-137°F)
Initial boiling point and boiling range	56°C (133°F)
Flash point	-17°C (1°F) Closed Cup
Evaporation rate	Not Available
Flammability (solid, gas)	Flammable
Upper/lower flammability or explosive limit	LEL:2% UEL:13%
Vapor pressure	184 mmHg
Vapor density	2.0
Relative density	Not Available
Solubility (ies)	Completely soluble in water
Partition coefficient: n-octanol/water	Log Pow: -.024
Auto-ignition temperature	465°C (869°F)
Decomposition temperature	Not Available

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable.
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Heat, flame, sparks.
<b>Incompatible Materials</b>	Strong bases, oxidizing agents, phosphorus oxychloride.
<b>Hazardous Decomposition Products</b>	Carbon oxides.

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## 11. TOXICOLOGICAL INFORMATION

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### Acute Toxicity

<b>Skin</b>	LD50 Dermal – guinea pig – 7,426 mg/kg.
<b>Eyes</b>	Eyes – rabbit – Eye irritation – 24 hours
<b>Respiratory</b>	LC50 Inhalation – rat – 8 hours – 50,100 mg/m <sup>3</sup> .
<b>Ingestion</b>	LD50 Oral – rat – 5,800 mg/kg.

### Carcinogenicity

<b>IARC</b>	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

<b>Skin</b>	Burning, itching, redness, may be harmful if absorbed through skin.
<b>Eyes</b>	Redness, excessive blinking and watering eyes.
<b>Respiratory</b>	Coughing, wheezing, headache, disorientation, blurred vision, dizziness, fatigue or nausea.
<b>Ingestion</b>	Nausea, vomiting, may cause blindness and central nervous system depression.

<b>Chronic Toxicity</b>	Not Available
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	Not Available
<b>Embryotoxicity</b>	Not Available
<b>Specific Target Organ Toxicity</b>	Not Available
<b>Reproductive Toxicity</b>	Not Available
<b>Respiratory/Skin Sensitization</b>	Not Available

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## 12. ECOLOGICAL INFORMATION

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### Ecotoxicity

<b>Aquatic Vertebrate</b>	LC50 – <i>Oncorhynchus mykiss</i> (Rainbow trout) – 5549 mg/l – 96 hours
<b>Aquatic Invertebrate</b>	EC50 – <i>Daphnia magna</i> (Water flea) – 13500.00 mg/l – 48 hours
<b>Terrestrial</b>	Not Available.

<b>Persistence and Degradability</b>	Not Available.
<b>Bioaccumulative Potential</b>	Not Available.
<b>Mobility in Soil</b>	Not Available.
<b>PBT and vPvB Assessment</b>	Not Available.
<b>Other Adverse Effects</b>	Not Available.

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## 13. DISPOSAL CONSIDERATIONS

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<b>Waste Residues</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste products or residues.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

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## 14. TRANSPORT INFORMATION

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US DOT	UN1090, Acetone, 3, pg II
TDG	UN1090, ACETONE, 3, pg II
IDMG	UN1090, ACETONE, 3, pg II
Marine Pollutant	No
IATA/ICAO	UN1090, Acetone, 3, pg II

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## 15. REGULATORY INFORMATION

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TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed.
SARA 302	Listed: Acetone
SARA 304	Listed: Acetone
SARA 311	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 312	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2B: Material causing other toxic effects (VERY TOXIC).

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## 16. OTHER INFORMATION

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Revision	Date
Revision 1	01/28/2013
Revision 2	06/19/2013

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