Material Safety Data Sheet

Revision Issued: 8/23/99 Supercedes: 1/22/96 First Issued: 3/04/87

Section I - Chemical Product And Company Identification

Product Name: Acetone

CAS Number: 67-64-1 HBCC MSDS No. CA02000

HILL BROTHERS Chemical Co.
1675 NORTH MAIN STREET • ORANGE, CALIFORNIA 92867-3499
(714) 998-8800 • FAX: (714) 998-6310
http://hillbrothers.com

1675 No. Main Street, Orange, California 92867
Telephone No: 714-998-8800 | Outside Calif: 800-821-7234 | Chemtrec: 800-424-9300

Section II - Composition/Information On Ingredients

			Exposure Limits (TWAs) in Air		
Chemical Name	CAS Number	%	ACGIH TLV	OSHA PEL	STEL
Acetone	67-64-1	100	750 ppm	750 ppm	1000 ppm
Benzene	71-43-2	0.0003	10 ppm	1 ppm	5 ppm

Section III - Hazard Identification

Routes of Exposure: Inhalation, skin absorption, ingestion, or eye contact.

Summary of Acute Health Hazards

Ingestion: Acetone has a low order of toxicity but is very irritating to mucous membranes. Ingestion of a toxic dose can cause gastroenteric irritation, narcosis and injury to the kidneys and liver. Aspiration into lungs can produce severe lung damage and is a medical emergency. Other symptoms are expected to parallel inhalation.

Inhalation: The vapor is irritating to mucous membranes. Vapor concentration of 2,500-3,000 ppm causes minor irritation of eyes, nose and throat. Inhalation of higher concentration may cause headache, nausea, confusion, drowsiness, convulsions and coma. Higher concentrations can produce central nervous system depression, narcosis, and unconsciousness.

Skin: Prolonged exposure to the vapor irritates the skin. Repeated and prolonged contact of the liquid with skin can cause dryness and erythema (inflammation).

Eyes: Eye contact with acetone is irritating and may be damaging.

Summary of Chronic Health Hazards: N/A

Effects of Overexposure: Acts as an anesthetic in very high concentrations. Headache, nausea, dizziness, and narcosis can result from excessive exposure to vapors. Causes severe eye irritation, experienced as discomfort or pain, excess blinking and tear production, with marked excess redness and swelling of the conjunctiva. Corneal injury may occur. Prolonged contact of the liquid with the skin can have a defatting action and may result in dermititus. Absorption through intact skin is not expected to cause systemic injury; however, possible skin absorption should be considered in meeting TLV requirements.

Medical Conditions Generally Aggravated by Exposure: Use of alcoholic beverages enhances toxic effects. Exposure may increase the toxic potential of chlorinated hydrocarbons, such as chloroform, trichloroethane.

Note to Physicians: Aspirated acetone may cause severe lung damage and present a significant hazard. Stomach contents should be evacuated quickly in a manner which avoids aspiration. Otherwise, treatment of overexposure is directed at the control of symptoms and the clinical condition of the patient. No specific antidote is known.

Section IV - First Aid Measures

Ingestion: Do not make an unconscious person vomit. If conscious give 2 glasses of water to dilute. DO NOT INDUCE

VOMITING. GET MEDICAL ATTENTION IMMEDIATELY. No specific antidote known. If vomiting occurs, keep head below hips to prevent aspiration into the lungs.

Inhalation: Remove to fresh air. Administer artificial respiration if breathing is irregular or stopped. If breathing is difficult, oxygen may be given by qualified personnel. GET MEDICAL ATTENTION.

Skin: Wash with large quantities of water and soap or a mild detergent. Remove contaminated clothing. Seek medical attention if irritation from contact persists.

Eyes: Flush eyes with water immediately for at least 15 minutes, lifting the upper and lower lids. GET MEDICAL ATTENTION, preferably from an opthalmologist.

Section V - Fire Fighting Measures

Flash Point: 0^{o}F

Autoignition Temperature: 869^{o}F

Lower Explosive Limit: 2.5

Upper Explosive Limit: 12.8

Unusual Fire and Explosion Hazards: Vapors form from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from product handling point. Vapors from this material may settle in low or confined areas or tavel a long distance to an ignition source and flash back explosively. This material may produce a floating fire hazard.

Extinguishing Media: Small fire : Use carbon dioxide or dry chemical. Large fire: Use polar solvent (alcohol) type foam. The normal firefighting foams that are suitable for gasoline or hydrocarbon fires will break down and will not extinguish acetone fires. Water spray will reduce the intensity of flames. Acetone/water solutions have flash points when the acetone concentration is greater than 8% (by weight). The fire point, which is the percent by weight when a solution sustains a flame, is higher than that.

Special Firefighting Procedures: The use of self-contained breathing apparatus is recommended for fire fighters. Use water spray to cool fire-exposed containers and to dilute and reduce fire intensity. Use remote spray monitors or fight fire from behind shields. Use water spray to disperse vapors; re-ignition is possible.

Section VI - Accidental Release Measures

Provide maximum explosion-proof ventilation. Eliminate all sources of ignition. Flush spilled material into suitable retaining areas or containers with large quantities of water. Small amounts of spilled material may be absorbed into an appropriate absorbant.

Section VII - Handling and Storage

Handling and Storing Precautions: Store in a cool, clean, well-ventilated fireproof storage room or cabined to meet OSHA requirements. Sprinkler fire protection is needed in areas of storage, handling and use. Acetone must be stored and handled away from heat. Electrically interconnect and ground containers for all transfers of acetone to avoid fires from static sparks. Avoid breathing vapor.

Other Precautions: Transfer hazard: Vapors of this product may be ignited by static sparks. Use proper bonding and grounding during liquid transfer as described in National Fire Protection Association document NFPA 77.

Section VIII - Exposure Controls/Personal Protection

Respiratory Protection: Use only NIOSH- or MSHA -approved respirators. For a non-routine or emergency exposure above the TLV, use a full facepiece gas mask with organic vapor canister, or a air-supplied respirator in accordance with conditions. Use self-contained breathing apparatus in high vapor concentrations.

Respirator Selection

5,000 ppm: GMOVc* 20,000 ppm: GMOVfb/SAF/SCBAF* Escape: GMOV/SCBA* *see below

Ventilation: General mechanical ventilation may be sufficient to keep product vapor concentrations within specified time-weighted TLV ranges. Supplemental local exhaust may be required to maintain safe vapor concentrations.

Protective Clothing: Wear appropriate clothing to prevent repeated or prolonged skin contact. The use of impermeable gloves, aprons, boots, and lab coat are advised to prevent skin irritation.

Eye Protection: Safety glasses, chemical goggles, and/or face shields are recommended to safeguard against potential eye contact, irritation, or injury.

Other Protective Clothing or Equipment: Eye washes and safety showers should be readily available in the work areas.

Work/Hygienic Practices: Employees should wash promptly when skin is wet.

Section IX - Physical and Chemical Properties

Physical State: Liquid

pH: N/A

Melting Point/Range: -138°F (-94.7°C)

Boiling Point/Range: 133°F (56.5°C)

Appearance/Color/Odor: Clear, colorless liquid with a sweet, mint-like odor

Solubility in Water: Miscible in all proportions in water

Vapor Pressure(mmHg): 400 @ 104°F; (39.5°C)

Specific Gravity(Water=1): 0.791 @ 20°C

Molecular Weight: 58.08

Vapor Density(Air=1): 2.0

% Volatiles: 100%

How to detect this compound : N/A

Freezing Point: -96.54°C (-141.77°F)

Evaporation Rate (Butyl Acetate=1): Ca. 7.7

Section X - Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: Heat - acetone is a highly flammable material.

Materials to Avoid: Acetone is incompatible with strong oxidizing agents and strong acids or bases. Concentrated nitric and sulfuric acid mixtures, oxidizing materials, chloroform, alkalis, chlorine compounds, acids, potassium t-butoxide.

Hazardous Decomposition Products: Thermal decomposition in the presence of air may yield carbon monoxide and/or carbon dioxide.

Section XI - Toxicological Information

N/A

Section XII - Ecological Information

N/A

Section XIII - Disposal Considerations

Incineration is a recommended method to dispose of scrap acetone. Dispose of acetone in accordance with applicable local, county, state and federal regulations

Section XIV - Transport Information

DOT Proper Shipping Name: Acetone

DOT Hazard Class/ I.D. No.: 3,UN1090, II

Section XV - Regulatory Information

CALIFORNIA PROPOSITION 65: WARNING

This product contains trace levels of Benzene, Formaldehyde, and Acetaldehyde which the state of California has found to cause cancer.

Medical Surveillance Suggested: Preplacement examinations should evaluate skin and respiratory conditions. Acetone can be detected in the blood, urine, and expired air and has been used as an index of exposure.

Reportable Quantity: 5000 Lbs (2270 Kilograms) (753.01 Gals)

NFPA Rating: Health - 1; Fire - 3; Reactivity - 0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

Carcinogenicity Lists: NTP: No **IARC Monograph:** No **OSHA Regulated:** Yes

Section 313 Supplier Notification: This product contains the following toxic chemcial(s) subject to the reporting requirements of SARA TITLE III Section 313 of the Emergency Planning and Community Right-To Know Act of 1986 and of 40 CFR 372:

CAS #	Chemical Name	% By Weight
67-64-1	Acetone	100%

Section XVI - Other Information

Synonyms/Common Names: Dimethyl Ketone, Propanone, 2-propanone, Dimethyl Ketal
Chemical Family/Type: Oxygenated Hydrocarbon, Ketone

IMPORTANT! Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This MSDS has been prepared according to the OSHA Hazard Communication Standard [29 CFR 1910.1200]. The MSDS information is based on sources believed to be reliable. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, **Hill Brothers Chemical Company** makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Also, additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks prior to use, and then to exercise appropriate precautions for protection of employees and others.

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