



MATERIAL SAFETY DATA SHEET

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MSDS No. AA 25
Effective Date January 14, 1999

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	ACETONE
Chemical Synonyms	2-Propanone; Dimethyl Ketone
Formula	CH ₃ COCH ₃
Unit Size	Up to 20 Liters.
C.A.S. No.	67-64-1

	CHEMTREC 800-424-9300 Day 716-226-6177	<table><tr><td>Health</td><td>2</td></tr><tr><td>Fire</td><td>3</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health	2	Fire	3	Reactivity	0
Health	2							
Fire	3							
Reactivity	0							
NFPA HAZARD RATING LEAST SLIGHT MODERATE 0 1 2		HMIS* HIGH EXTREME 3 4						

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Acetone: (CAS No. 67-64-1)	>99.5%	See Section V.
May contain trace amounts of		
Benzene: (CAS No. 71-43-2) (suspected carcinogen).		

DANGER! EXTREMELY FLAMMABLE! CAUSES EYE IRRITATION

SECTION III PHYSICAL DATA

Melting Point (°F)	-94°C (-137°F)	Specific Gravity (H ₂ O = 1)	0.7880 @ 25°C/25°C
Boiling Point (°F)	56.48°C (132.8°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	181.7 @ 20°C.	Evaporation Rate (Butyl Ac. = 1)	>7.0
Vapor Density (Air=1)	2.00		
Solubility in Water	Completely miscible.		
Appearance & Odor	Colorless liquid, pungent odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	-18°C (0°F) TCC	Flammable Limits in Air % by Volume	Lower 2.6%	Upper 12.8%
Extinguisher Media	Carbon dioxide (CO ₂); dry chemical (ABC); water spray; alcohol foam.			

SPECIAL FIREFIGHTING PROCEDURES

Water should be used to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure and to dilute spills to non-flammable mixtures. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 127)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Acetone is extremely flammable and its vapors form explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or strong oxidizing agents.

Autoignition Temperature: 1000°F (538°C).

D.O.T. ACETONE, 3, UN 1090, PG II

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value

TWA (Air): 750 ppm; 1,780 mg/m³ STEL (Air): 1,000 ppm 2380 mg/m³ (ACGIH 1992-93).

Effects of Overexposure

INHALATION: Vapors are irritating to eyes, nose, and throat. High vapor concentrations may result in headache, dizziness, and nausea. **SKIN:** Repeated contact causes defatting and chapping and drying of skin. **EYES:** Causes severe irritation, redness and swelling. **INGESTION:** Slightly toxic, causes nausea, vomiting, headache, dizziness, and unconsciousness. Aspiration hazard.

Emergency and First Aid Procedures

INHALATION: Remove to fresh air. If breathing has stopped, give artificial respiration. Give oxygen by qualified personnel, call a physician. **SKIN:** Wash contact area with soap and water. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **INGESTION:** DO NOT INDUCE VOMITING! Call a physician. If conscious, give one or two glasses of water to drink. Never give anything by mouth to an unconscious person.

SECTION VI REACTIVITY DATA

Stability	Unstable	Stable	Conditions to Avoid	Excessive temperatures, heat, sparks and open flame and other sources of ignition.
		X		

Incompatibility (Materials to Avoid)	Chloroform; Chromic Anhydride; Hydrogen Peroxide; Nitric Acid and Acetic Acid; Nitric and Sulfuric Acid; Sulfuric Acid and Potassium Dichromate. Strong oxidizers.
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Hazardous Decomposition Products	Complete combustion yields carbon dioxide and water vapor; Incomplete combustion can produce carbon monoxide.
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Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Eliminate all sources of ignition. <u>Small spill</u> - allow to evaporate if it can be done safely. Otherwise soak up with absorbent material and scoop into drum.
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Waste Disposal Method	Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.
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Burn in an approved incinerator, if local environmental regulations permit.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	Work in fume hood or wear a NIOSH/MSHA-approved all purpose canister mask.			
Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	Adequate to maintain below exposure limit.
Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.	
Other Protective Equipment	Safety glasses, lab coat, vented hood, proper gloves, fire extinguisher, eye wash station.			

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Keep away from heat, sparks, flame. Store in a cool, well-ventilated area. Use with adequate ventilation.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
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Avoid contact with eyes. Avoid prolonged or repeated breathing of vapor. Avoid prolonged or repeated contact with skin. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 7	Date 1/14/99	Approved Michael Raszeja	Chemical Safety Coordinator	MR
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