

MATERIAL SAFETY DATA SHEET

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Version 1.3

Section 1 - Product and Company Information

Product Name ACETOPHENONE, 99%
Product Number A10701
Brand ALDRICH

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS MO 63103 US
Technical Phone: 314 771 5765
Emergency Phone: 414 273 3850 Ext. 5996
Fax: 800 325 5052

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
ACETOPHENONE	98-86-2	Yes

Formula C8H8O
Synonyms Acetofenon (Czech) * Acetophenon * Acetophenone (ACGIH) * Acetylbenzene * Benzene, acetyl- * Benzoyl methide * Ethanone, 1-phenyl- (9CI) * Hypnon * Hypnone * Ketone, methyl phenyl * Methyl phenyl ketone * 1-Phenylethanone * Phenyl methyl ketone * RCRA waste number U004 * USAF EK-496
RTECS Number: AM5250000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful.

Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes.

Combustible.

HMIS RATING

HEALTH: 2

FLAMMABILITY: 2

REACTIVITY: 0

NFPA RATING

HEALTH: 2

FLAMMABILITY: 2

REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT

168.8 °F 76 °C Method: closed cup

AUTOIGNITION TEMP

570 °C

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Combustible liquid.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING

User Exposure: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed. Keep away from heat and open flame. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

EXPOSURE LIMITS, RTECS

Country	Source	Type	Value
USA USA	ACGIH ACGIH	TWA TWA	49 MG/M3 (10 PPM) 10 PPM

Section 9 - Physical/Chemical Properties

Appearance	Physical State: Clear liquid Liquid Color: Colorless		
Property	Value	At Temperature or Pressure	
Molecular Weight	120.15 AMU		
pH	N/A		
BP/BP Range	83 - 85 °C	11 mmHg	
MP/MP Range	19 °C		
Freezing Point	N/A		
Vapor Pressure	1 mmHg	15 °C	
Vapor Density	4.1 g/l		
Saturated Vapor Conc.	N/A		
SG/Density	1.027 g/cm3		
Bulk Density	N/A		
Odor Threshold	N/A		
Volatile%	N/A		
VOC Content	N/A		
Water Content	< 0.3 %		
Solvent Content	N/A		
Evaporation Rate	N/A		
Viscosity	N/A		
Surface Tension	N/A		
Partition Coefficient	N/A		
Decomposition Temp.	N/A		
Flash Point	168.8 °F 76 °C	Method: closed cup	
Explosion Limits	N/A		
Flammability	N/A		
Autoignition Temp	570 °C		
Refractive Index	1.534		
Optical Rotation	N/A		
Miscellaneous Data	N/A		
Solubility	N/A		

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents, Strong bases, Strong reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Severe eye irritant.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Oral
Rat
815 mg/kg
LD50

Oral
Mouse
740 mg/kg
LD50

Intraperitoneal
Mouse
200 MG/KG
LD50

Skin
Rabbit
15900 UL/KG
LD50

Skin
Guinea pig
>20 ML/KG
LD50

Oral
Mammal
2700 mg/kg
LD50

Inhalation
Mammal
1,200 mg/m³
LC50

IRRITATION DATA

Skin
Rabbit
10 mg
24H
Remarks: Open irritation test

Skin
Rabbit

515 mg
Remarks: Open irritation test

Eyes
Rabbit
0.75 mg
Remarks: Severe irritation effect

CHRONIC EXPOSURE - MUTAGEN

Species: Hamster
Dose: 600 MG/L
Cell Type: lung
Mutation test: Cytogenetic analysis

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Aviation Regulated Liquid, N.O.S.
UN#: 3334
Class: 9
Packing Group: Packing Group III
Hazard Label: Class 9
PIH: Not PIH

IATA

Proper Shipping Name: Aviation Regulated Liquid, N.O.S.
IATA UN Number: 3334
Hazard Class: 9

Section 15 - Regulatory Information

EU DIRECTIVES CLASSIFICATION

Symbol of Danger: Xn
Indication of Danger: Harmful.
R: 22 36
Risk Statements: Harmful if swallowed. Irritating to eyes.
S: 26
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.
Risk Statements: Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes.
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.
US Statements: Combustible.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: Yes
DEMINIMIS: 1 %
NOTES: This product is subject to SARA section 313 reporting requirements.
TSCA INVENTORY ITEM: Yes Yes

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.