

SAFETY DATA SHEET

Version 3.6
Revision Date 07/01/2014
Print Date 07/15/2014

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Acetophenone

Product Number : 00800
Brand : Fluka
Index-No. : 606-042-00-1

CAS-No. : 98-86-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227
Acute toxicity, Oral (Category 4), H302
Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word : Danger

Hazard statement(s)

H227 : Combustible liquid
H302 : Harmful if swallowed.
H318 : Causes serious eye damage.

Precautionary statement(s)

P210 : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P264 : Wash skin thoroughly after handling.
P270 : Do not eat, drink or smoke when using this product.
P280 : Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 : IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P310

P330

P370 + P378

Rinse mouth.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P403 + P235

Store in a well-ventilated place. Keep cool.

P501

Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : Methyl phenyl ketone

Formula : C₈H₈O
Molecular Weight : 120.15 g/mol
CAS-No. : 98-86-2
EC-No. : 202-708-7
Index-No. : 606-042-00-1

Hazardous components

Component	Classification	Concentration
Acetophenone	Flam. Liq. 4; Acute Tox. 4; Eye Dam. 1; H227, H302, H318	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides

5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end uses(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Comments with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Acetophenone	98-86-2	TWA	10 ppm	USA, ACGIH Threshold Limit Values (TLV)
		Eye irritation	10 ppm	USA, Workplace Environmental Exposure Levels (WEEL)
Remarks				

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: butyl-rubber

Minimum layer thickness: 0.3 mm
Break through time: 480 min

Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M)

Splash contact

Material: Nature latex/chloroprene
Minimum layer thickness: 0.6 mm

Break through time: 30 min
Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M)

EN374
data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance

Form: clear, liquid
Colour: colourless

b) Odour

no data available

c) Odour Threshold

no data available

d) pH

no data available

e) Melting point/freezing point

Melting point/range: 19 - 20 °C (66 - 68 °F) - lit.

f) Initial boiling point and boiling range

202 °C (396 °F) - lit.

g) Flash point

76 °C (169 °F) - closed cup

h) Evaporation rate

no data available

i) Flammability (solid, gas)

no data available

j) Upper/lower flammability or explosive limits

Upper explosion limit: 5.2 % (V)
Lower explosion limit: 1.4 % (V)

k) Vapour pressure

1 hPa (1 mmHg) at 15 °C (59 °F)

l) Vapour density

4.15 - (Air = 1.0)

m) Relative density

1.03 g/cm3 at 25 °C (77 °F)

- n) Water solubility no data available
- o) Partition coefficient: n-octanol/water log Pow: 1.6
- p) Auto-ignition temperature no data available
- q) Decomposition temperature no data available
- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available

9.2 Other safety information

Relative vapour density 4.15 - (Air = 1.0)

10. STABILITY AND REACTIVITY

- 10.1 **Reactivity**
no data available
- 10.2 **Chemical stability**
Stable under recommended storage conditions.
- 10.3 **Possibility of hazardous reactions**
no data available
- 10.4 **Conditions to avoid**
Heat, flames and sparks.
- 10.5 **Incompatible materials**
Strong oxidizing agents, Strong bases, Strong reducing agents
- 10.6 **Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 815 mg/kg

Inhalation: no data available

LD50 Dermal - rabbit - 16,329 mg/kg

no data available

Skin corrosion/irritation

Skin - rabbit

Result: Mild skin irritation

(Draize Test)

Serious eye damage/eye irritation

Eyes - rabbit

Result: Severe eye irritation

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Hamster

Lungs

Cytogenetic analysis

Carcinogenicity

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

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: AM5250000

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

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 162 mg/l - 96 h

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Fluka - 00800

Delivery 0848111780-000050 Purchase Order P0040453

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UN number: 3334 Class: 9
 Proper shipping name: A Aviation regulated liquid, n.o.s. (Acetophenone)
 Reportable Quantity (RQ): 5000 lbs
 Marine pollutant: No
 Poison Inhalation Hazard: No

IMDG
 Not dangerous goods
IATA
 UN number: 3334 Class: 9
 Proper shipping name: Aviation regulated liquid, n.o.s. (Acetophenone)
 Packaging group: III

15. REGULATORY INFORMATION

SARA 302 Components
 SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
 The following components are subject to reporting levels established by SARA Title III, Section 313:

Acetophenone
 CAS-No. 98-86-2
 Revision Date 1993-04-24

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

Massachusetts Right To Know Components

Acetophenone
 CAS-No. 98-86-2
 Revision Date 1993-04-24

Pennsylvania Right To Know Components

Acetophenone
 CAS-No. 98-86-2
 Revision Date 1993-04-24

New Jersey Right To Know Components

Acetophenone
 CAS-No. 98-86-2
 Revision Date 1993-04-24

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Eye Dam. Serious eye damage
 H227 Flam. Liq. Serious eye damage
 H302 Harmful if swallowed.
 H318 Causes serious eye damage.

HMS Rating
 Health Hazard: 2
 Chronic Health Hazard: 2
 Flammability: 2
 Physical Hazard: 0

NFPA Rating
 Health Hazard: 2
 Fire Hazard: 2
 Reactivity Hazard: 0

Version: 3.6

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Preparation Information
 Sigma-Aldrich Corporation
 Product Safety – Americas Region
 1-800-521-8956

Further Information
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