

**4-METHYL ACETOPHENONE
CAS NO 122-00-9**

**MATERIAL SAFETY DATA SHEET
SDS/MSDS**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : 4-Methyl Acetophenone

CAS-No. : 122-00-9

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi -110002
INDIA

Telephone : +91 11 49404040

Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Skin irritation (Category 2), H315

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Warning

Hazard statement(s)

H302

Harmful if swallowed.

H315

Causes skin irritation.

Precautionary statement(s)

P301 + P312 + P330

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Rinse mouth.

Supplemental Hazard Statements none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Methyl p-tolyl ketone

Formula : C₉H₁₀O

Molecular weight : 134.18 g/mol

CAS-No. : 122-00-9

EC-No. : 204-514-8

Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component | | Classification | Concentration |
|------------------------------|-----------|------------------------------|---------------|
| 4'-Methylacetophenone | | | |
| CAS-No. | 122-00-9 | Acute Tox. 4; Skin Irrit. 2; | <= 100 % |
| EC-No. | 204-514-8 | H302, H315 | |

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

SECTION 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.

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

Flush eyes with water as a precaution.

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

SECTION 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 firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 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. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Combustible liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL)

| Application Area | Exposure routes | Health effect | Value |
|------------------|-----------------|----------------------------|-------------------------|
| Workers | Inhalation | Long-term systemic effects | 20.36 mg/m ³ |
| Workers | Skin contact | Long-term systemic effects | 5.78mg/kg BW/d |

Predicted No Effect Concentration (PNEC)

| Compartment | Value |
|------------------------|-------------|
| Soil | 0.025 mg/kg |
| Marine water | 0.003 mg/l |
| Fresh water | 0.031 mg/l |
| Marine sediment | 0.021 mg/kg |
| Fresh water sediment | 0.214 mg/kg |
| Sewage treatment plant | 10 mg/l |

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

Face shield and safety glasses 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.

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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

| | |
|-------------------------------------------------|----------------------------------------|
| a) Appearance | Form: liquid Colour: light yellow |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/freezing point | Melting point/range: 22 - 24 °C - lit. |
| f) Initial boiling point and boiling range | 226 °C - lit. |
| g) Flash point | 82 °C - closed cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure | No data available |
| l) Vapour density | No data available |
| m) Relative density | 1.005 g/cm ³ at 25 °C |
| n) Water solubility | 2.072 g/l |
| o) Partition coefficient: n-octanol/water | log Pow: 2.1 |
| p) Auto-ignition temperature | No data available |
| q) Decomposition temperatur | 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

No data available

SECTION 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

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 1,400 mg/kg(4'-Methylacetophenone)

Skin corrosion/irritation

Moderate skin irritation(4'-Methylacetophenone)

Serious eye damage/eye irritation

No data available(4'-Methylacetophenone)

Respiratory or skin sensitisation

- Guinea pig(4'-Methylacetophenone)

Result: Does not cause skin sensitisation.

Germ cell mutagenicity

No data available(4'-Methylacetophenone)

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.

Reproductive toxicity

No data available(4'-Methylacetophenone)

Specific target organ toxicity - single exposure

No data available(4'-Methylacetophenone)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(4'-Methylacetophenone)

Additional Information

RTECS: AM9463000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(4'-Methylacetophenone)

SECTION 12: Ecological information

12.1 Toxicity

| | |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Toxicity to fish | LC50 - Danio rerio (zebra fish) - 71 mg/l - 96 h(4'-Methylacetophenone) (OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 31 mg/l - 48 h(4'-Methylacetophenone) (Directive 67/548/EEC, Annex V, C.2.) |
| Toxicity to algae | EC50 - Pseudokirchneriella subcapitata (green algae) - 36 mg/l - 72 h(4'- Methylacetophenone) (OECD Test Guideline 201) |

12.2 Persistence and degradability

| | |
|------------------|-------------------------------------------------------------------|
| Biodegradability | Result: 60 % - Readily biodegradable (OECD Test Guideline 301) |
|------------------|-------------------------------------------------------------------|

12.3 Bioaccumulative potential

No bioaccumulation is to be expected (log Pow <= 4).

12.4 Mobility in soil

No data available(4'-Methylacetophenone)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Harmful to aquatic life.

No data available

SECTION 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.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

| | | |
|------------|---------|---------|
| ADR/RID: - | IMDG: - | IATA: - |
|------------|---------|---------|

14.2 UN proper shipping name

| |
|------------------------------|
| ADR/RID: Not dangerous goods |
| IMDG: Not dangerous goods |
| IATA: Not dangerous goods |

14.3 Transport hazard class(es)

| | | |
|------------|---------|---------|
| ADR/RID: - | IMDG: - | IATA: - |
|------------|---------|---------|

14.4 Packaging group

| | | |
|------------|---------|---------|
| ADR/RID: - | IMDG: - | IATA: - |
|------------|---------|---------|

14.5 Environmental hazards

| | | |
|-------------|---------------------------|----------|
| ADR/RID: no | IMDG Marine pollutant: no | IATA: no |
|-------------|---------------------------|----------|

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

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

H302 Harmful if swallowed.

H315 Causes skin irritation.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.