

## Chemical Safety Data Sheet MSDS / SDS

## 4-Methylanisole

Revision Date:2026-03-21 Revision Number:1

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

## Product identifier

Product name : 4-Methylanisole  
CBnumber : CB0327875  
CAS : 104-93-8  
EINECS Number : 203-253-7  
Synonyms : 1-METHOXY-4-METHYLBENZENE;MSO

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

## Company Identification

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

## SECTION 2: Hazards identification

## GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Warning

## Precautionary statements

P308+P313 IF exposed or concerned: Get medical advice/attention.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.  
P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.  
P273 Avoid release to the environment.  
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
P202 Do not handle until all safety precautions have been read and understood.

## Hazard statements

H412 Harmful to aquatic life with long lasting effects  
H361 Suspected of damaging fertility or the unborn child  
H315 Causes skin irritation

H302 Harmful if swallowed  
H226 Flammable liquid and vapour

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## SECTION 3: Composition/information on ingredients

### Substance

|              |                                    |
|--------------|------------------------------------|
| Product name | : 4-Methylanisole                  |
| Synonyms     | : 1-METHOXY-4-METHYLBENZENE;MSO    |
| CAS          | : 104-93-8                         |
| EC number    | : 203-253-7                        |
| MF           | : C <sub>8</sub> H <sub>10</sub> O |
| MW           | : 122.16                           |

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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). 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) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

### 4.4 Notes to physician

No data available

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>) Foam Dry powder

### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air at elevated temperatures.

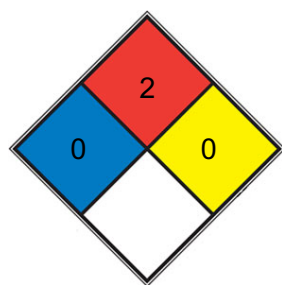
Development of hazardous combustion gases or vapours possible in the event of fire.

## 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

### NFPA 704



**HEALTH** 0 Poses no health hazard, no precautions necessary and would offer no hazard beyond that of ordinary combustible materials

**FIRE** 2 Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur and multiple finely divided suspended solids that do not require heating before ignition can occur. Flash point between 37.8 and 93.3 °C (100 and 200 °F). (e.g. diesel fuel, [sulfur](#))

**REACT** 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, [N<sub>2</sub>](#))

**SPEC.**

**HAZ.**

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®).

Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

#### Storage class

Storage class (TRGS 510): 3: Flammable liquids

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

##### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Full contact

Material: Viton®

Minimum layer thickness: 0.7 mm

Break through time: 480 min

Material tested: Vitoject® (KCL 890 / Aldrich Z677698, Size M)

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Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 30 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

#### Body Protection

Flame retardant antistatic protective clothing.

#### Respiratory protection

required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### Control of environmental exposure

Do not let product enter drains. Risk of explosion.

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

|                                                 |                                                                                     |
|-------------------------------------------------|-------------------------------------------------------------------------------------|
| a) Physical state                               | clear, liquid                                                                       |
| b) Color                                        | colorless                                                                           |
| c) Odor                                         | at 1.00 % in dipropylene glycol. naphthyl cresol ylang powdery nutty                |
| d) Melting point/freezing point                 | Melting point/range: -32 °C                                                         |
| e) Initial boiling point and boiling range      | 174 °C - lit.                                                                       |
| f) Flammability (solid, gas)                    | No data available                                                                   |
| g) Upper/lower flammability or explosive limits | 1.1-8.3%(V)                                                                         |
| h) Flash point                                  | 59 °C - closed cup                                                                  |
| i) Autoignition temperature                     | 490 °C at 1,013 hPa                                                                 |
| j) Decomposition temperature                    | No data available                                                                   |
| k) pH                                           | No data available                                                                   |
| l) Viscosity                                    | Viscosity, kinematic: No data available<br>Viscosity, dynamic: 0.814 mPa.s at 45 °C |
| m) Water solubility                             | 0.559 g/l at 20 °C                                                                  |
| n) Partition coefficient n-octanol/water        | log Pow: 2.609 at 25 °C                                                             |
| o) Vapor pressure                               | 7 hPa at 50 °C                                                                      |

|                             |                                                |
|-----------------------------|------------------------------------------------|
| p) Density                  | 0.969 g/cm <sup>3</sup> at 25 °C - lit.        |
| Relative density            | 0.97 at 20 °C                                  |
| r) Particle characteristics | No data available                              |
| s) Explosive properties     | No data available                              |
| t) Oxidizing properties     | none                                           |
| Solubility                  | Chloroform (Soluble), Ethyl Acetate (Slightly) |
| Dielectric constant         | 4.0300000000000002                             |

## 9.2 Other safety information

No data available

# SECTION 10: Stability and reactivity

## 10.1 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 10.2 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

## 10.3 Conditions to avoid

Heating.

## 10.4 Incompatible materials

No data available

## 10.5 Hazardous decomposition products

In the event of fire: see section 5

# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Acute toxicity

LD50 Oral - Rat - male and female - 1,920 mg/kg (OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 6.1 mg/l - vapor (OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 4,850 mg/kg (OECD Test Guideline 402)

### Skin corrosion/irritation

Skin - Rabbit

Result: Irritations - 4 h (OECD Test Guideline 404)

### Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

### Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative (OECD Test Guideline 429)

#### **Germ cell mutagenicity**

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Micronucleus test

Species: Mouse

Cell type: Red blood cells (erythrocytes)

Application Route: Gavage

Method: OECD Test Guideline 474

Result: negative

Test Type: unscheduled DNA synthesis assay

Species: Mouse

Cell type: Liver cells

Application Route: Gavage

Method: OECD Test Guideline 486

Result: negative

#### **Carcinogenicity**

Classified based on available data. For more details, see section 2

#### **Reproductive toxicity**

Suspected of damaging the unborn child.

#### **Specific target organ toxicity - single exposure**

Classified based on available data. For more details, see section 2

#### **Specific target organ toxicity - repeated exposure**

Classified based on available data. For more details, see section 2

#### **Aspiration hazard**

Classified based on available data. For more details, see section 2

### **11.2 Additional Information**

Repeated dose toxicity - Rat - male and female - Gavage - 4 Weeks - NOAEL (No observed adverse effect level) - 100 mg/kg

RTECS: BZ8780000

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

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## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Toxicity to fish static test LC50 - Leuciscus idus (Golden orfe) - 68.2 mg/l - 96 h (DIN 38412 part 15)

Toxicity to daphnia semi-static test EC50 - Daphnia magna (Water flea) - 27 mg/l - 48 h and other aquatic (OECD Test Guideline 202)  
invertebrates

Toxicity to algae static test ErC50 - *Desmodesmus subspicatus* (green algae) - > 500 mg/l - 72 h (DIN 38412)

Toxicity to bacteria EC50 - *Photobacterium phosphoreum* - 3.5 mg/l - 30 min

Remarks: (IUCLID)

## 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 79 % - Readily biodegradable.

(OECD Test Guideline 301F)

## 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 Endocrine disrupting properties

No data available

## 12.7 Other adverse effects

No data available

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# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

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# SECTION 14: Transport information

## 14.1 UN number

ADR/RID: 1993

IMDG: 1993

IATA-DGR: 1993

## 14.2 UN proper shipping name

ADR/RID: FLAMMABLE LIQUID, N.O.S. (4-methylanisole)

IMDG: FLAMMABLE LIQUID, N.O.S. (4-methylanisole)

IATA-DGR: Flammable liquid, n.o.s. (4-methylanisole)

## 14.3 Transport hazard class(es)

ADR/RID: 3  
IMDG: 3  
IATA-DGR: 3

#### 14.4 Packaging group

ADR/RID: III  
IMDG: III  
IATA-DGR: III

#### 14.5 Environmental hazards

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

#### 14.6 Special precautions for user

Based on chemical properties, choose appropriate tools and conditions of transport.

Transporting tools shall be equipped with appropriate and sufficient firefighting equipment and emergency leaking installations. If transporting by road, please go along the specified route.

#### 14.7 Incompatible materials

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## SECTION 15: Regulatory information

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

National regulatory information

Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals : Listed

Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for : Listed

Import and Export

Other regulations

Please pay attention on the waste treatment should also comply with local regulations requirement.

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## SECTION 16: Other information

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

**Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.