1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers
Product name : Methyl 4-hydroxybenzoate
Product Number : H5501
Brand : Sigma-Aldrich
CAS-No. : 99-76-3

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)
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

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

2.2 GHS Label elements, including precautionary statements
Pictogram : none
Signal word : none

Hazard statement(s)
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)
P273 Avoid release to the environment.
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 paraben
p-Hydroxybenzoic acid methyl ester

Formula : C₈H₈O₃
Molecular weight : 152.15 g/mol
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**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
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 firefighting if necessary.

5.4 Further information
No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
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
Pick up and arrange disposal without creating dust. Sweep up and shovel. 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 formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(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

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

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
Safety glasses with side-shields conforming to EN166 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: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
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
impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
**9. PHYSICAL AND CHEMICAL PROPERTIES**

9.1 **Information on basic physical and chemical properties**

a) Appearance
   - Form: crystalline
   - Colour: white

b) Odour
   - odourless

c) Odour Threshold
   - No data available

d) pH
   - No data available

e) Melting point/freezing point
   - Melting point/range: 125 - 128 °C (257 - 262 °F) - lit.

f) Initial boiling point and boiling range
   - No data available

g) Flash point
   - No data available

h) Evaporation rate
   - No data available

i) Flammability (solid, gas)
   - The product is not flammable. - Flammability (solids)

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
   - 1.38 g/cm³ at 20 °C (68 °F)

n) Water solubility
   - 1.88 g/l at 20 °C (68 °F) - OECD Test Guideline 105 - soluble

o) Partition coefficient: n-octanol/water
   - log Pow: 1.98

p) Auto-ignition temperature
   - > 403 °C (> 757 °F)

q) Decomposition temperature
   - No data available

r) Viscosity
   - No data available

s) Explosive properties
   - No data available

t) Oxidizing properties
   - The product has been shown not to be oxidising in a test following Directive 67/548/EEC (Method A17, oxidising properties).

9.2 **Other safety information**

- Dissociation constant: 8.4 at 23 °C (73 °F)

**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**
   - No data available
10.5 Incompatible materials
Strong oxidizing agents, Strong bases

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 - 2,100 mg/kg
(OECD Test Guideline 401)
Inhalation: No data available
Dermal: No data available
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation - 24 h

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Mild eye irritation

Respiratory or skin sensitisation
in vivo assay - Guinea pig
Result: Does not cause skin sensitisation.
(OECD Test Guideline 406)

Germ cell mutagenicity
Ames test
S. typhimurium
Result: negative

Skin - Rabbit
Result: No skin irritation

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
Developmental Toxicity - Rat - Oral
No adverse effect has been observed in chronic toxicity tests.

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
Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - >= 250 mg/kg
RTECS: DH2450000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Respiratory disorders

12. ECOLOGICAL INFORMATION

12.1 Toxicity

| Toxicity to fish | semi-static test LC50 - Oryzias latipes - 59.5 mg/l - 96 h (OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - 41.1 mg/l - 48 h (OECD Test Guideline 202) |
| Toxicity to algae | static test EC50 - Pseudokirchneriella subcapitata - 91 mg/l - 72 h (ISO 8692) |

12.2 Persistence and degradability

Biodegradability, aerobic - Exposure time 28 d
Result: 89 % - Readily biodegradable (OECD Test Guideline 301B)

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
Harmful to aquatic life with long lasting effects.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

15. REGULATORY INFORMATION

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

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
No SARA Hazards

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
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<td>Methyl 4-hydroxybenzoate</td>
<td>99-76-3</td>
<td>2012-07-01</td>
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**New Jersey Right To Know Components**

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</table>

**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.

<table>
<thead>
<tr>
<th>H-Statement</th>
<th>Description</th>
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<tbody>
<tr>
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<tr>
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</tbody>
</table>

**HMIS Rating**

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<th>Rating</th>
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<td>Health hazard</td>
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<tr>
<td>Chronic Health Hazard</td>
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<tr>
<td>Flammability</td>
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<td>Physical Hazard</td>
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**NFPA Rating**

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<tr>
<td>Fire Hazard</td>
<td>0</td>
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<tr>
<td>Reactivity Hazard</td>
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</table>

**Further information**

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**Preparation Information**

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

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