# U.S. Pharmacopeial

# SAFETY DATA SHEET

#### 1. Identification

Product identifier Methylparaben

Other means of identification

Catalog number 1432005 CAS number 99-76-3

Synonyms Methyl hydroxybenzoate

Chemical nameBenzoic acid, 4-hydroxy-, methyl esterRecommended useSpecified quality tests and assay use only.

**Recommended restrictions** Not for use as a drug. Not for administration to humans or animals.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name U. S. Pharmacopeia
Address 12601 Twinbrook Parkway

Rockville MD 20852-1790 United States

**Telephone** RS Technical Services 301-816-8129

Website www.usp.org
E-mail RSTECH@usp.org

Emergency phone number CHEMTREC within US & 1-800-424-9300

Canada

CHEMTREC outside US & +1 703-527-3887

Canada

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2B

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word Warning

Hazard statement Causes eye irritation.

**Precautionary statement** 

**Prevention** Wash thoroughly after handling.

**Response** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage Not available.

Disposal Not available.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

# 3. Composition/information on ingredients

Substance

Chemical nameCommon name and synonymsCAS number%MethylparabenMethyl hydroxybenzoate99-76-3100

### 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. If eye irritation persists: Get medical advice/attention.

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Ingestion

Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special Provide general supportive measures and treat symptomatically.

treatment needed

**General information** 

Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention.

5. Fire-fighting measures

Suitable extinguishing media

Water. Foam. Dry chemical or CO2. Use fire-extinguishing media appropriate for surrounding

materials.

Unsuitable extinguishing

media

None known.

Irritant effects.

Specific hazards arising from the chemical

Special protective equipment

No unusual fire or explosion hazards noted.

and precautions for firefighters

Wear suitable protective equipment.

Fire fighting equipment/instructions

Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area.

Firefighters should use self-contained breathing equipment and protective clothing.

Specific methods General fire hazards Use standard firefighting procedures and consider the hazards of other involved materials. No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

For waste disposal, see section 13 of the SDS. Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.

**Environmental precautions** 

Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

Precautions for safe handling

As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential.

Conditions for safe storage, including any incompatibilities

Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

# 8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

**Biological limit values** 

Appropriate engineering

controls

No biological exposure limits noted for the ingredient(s).

For laboratory operations, use good technique and limit open handling. Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred.

#### Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available.

Skin protection

Hand protection

Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent.

Other

Wear lab coat. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias)

or out-of-doors.

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Respirators are generally not required for laboratory operations. Chose respiratory protection Respiratory protection

appropriate to the task and the level of existing engineering controls.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Handling practices in this SDS are recommendations for laboratory use of reference standards.

Procedures for any other uses or quantities should be determined after an appropriate

assessment.

# 9. Physical and chemical properties

**Appearance** Appearance descriptions are general information and not specific to any USP lot.

Physical state Solid.

**Form** Crystalline powder.

Color White.

Odorless. Faint odor. Odor

**Odor threshold** Not available. Not available. pН

Melting point/freezing point 257 - 267.8 °F (125 - 131 °C)

Initial boiling point and boiling

range

518 - 536 °F (270 - 280 °C) (decomposes)

Flash point Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Not available. Explosive limit - lower (%) Not available. Explosive limit - upper (%)

Vapor pressure 0.0000006 hPa at 25 °C

Not available. Vapor density Not available. Relative density

Solubility(ies)

Slightly soluble. Solubility (water) Ethanol: Soluble. Solubility (other) Methanol: Soluble.

Acetone: Soluble. Ether: Soluble. Benzene: Soluble.

Carbon tetrachloride: Slightly soluble.

Partition coefficient (n-octanol/water)

1.96

Not available. **Auto-ignition temperature** Not available. **Decomposition temperature Viscosity** Not available.

Other information

**Chemical family** Aromatic carboxylic ester.

Molecular formula C8H8O3 152.15 Molecular weight 1.4 Specific gravity

#### 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Contact with incompatible materials. Conditions to avoid Incompatible materials Strong oxidizing agents. Strong bases.

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Hazardous decomposition

products

Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

# 11. Toxicological information

Information on likely routes of exposure

Inhalation Knowledge about health hazard is incomplete. Skin contact Knowledge about health hazard is incomplete.

Causes eye irritation. Eye contact

Ingestion Health injuries are not known or expected under normal use.

Symptoms related to the physical, chemical, and

toxicological characteristics Not available.

#### Information on toxicological effects

### **Acute toxicity**

**Product Test Results Species** Methylparaben (CAS 99-76-3) Oral LD50 > 8000 mg/kg Mouse Rat 2100 mg/kg Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye

Causes eye irritation.

irritation

#### Local effects

Eve irritation Result: Mild. Species: Rabbit Skin irritation Result: Mild. Species: Rabbit Test Duration: 24 hours

# Respiratory or skin sensitization

Respiratory sensitization Knowledge about health hazard is incomplete.

Skin sensitization Based on available data, the classification criteria are not met.

Human skin patch test Result: Negative.

Germ cell mutagenicity Knowledge about mutagenicity is incomplete.

# Mutagenicity

Ames test Result: Negative.

Mutagenicity (Salmonella typhimurium - reverse mutation

assay)

Result: Negative.

Based on available data, the classification criteria are not met. Carcinogenicity

Methylparaben was noncarcinogenic when injected subcutaneously in mice and rats.

# IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

# OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

# US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

#### Based on available data, the classification criteria are not met. Reproductive toxicity

#### Reproductivity

3 - 300 mg/kg/day Reproductivity

Result: No birth defects were observed among the offspring.

Species: Rabbit

5.5 - 550 mg/kg/day Reproductivity

Result: No birth defects were observed among the offspring

of pregnant mice or rats.

Species: Rodent

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Specific target organ toxicity -

single exposure

Knowledge about health hazard is incomplete.

Specific target organ toxicity -

Specific target organ

repeated exposure

Knowledge about health hazard is incomplete.

**Aspiration hazard** Based on available data, the classification criteria are not met.

# 12. Ecological information

**Ecotoxicity** 

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

**Bioaccumulative potential** 

Octanol/water partition coefficient log Kow

1.96

Mobility in soil No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

**Disposal instructions** 

Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Empty containers or liners may retain some product residues. This material and its container must

be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

# 14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

AIIIIEX II OI WARF

the IBC Code
General information

Not applicable.

It is the shipper's responsibility to determine the correct transport classification at the time of shipment.

15. Regulatory information

**US federal regulations** 

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated

**Hazard categories** 

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Yes

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#### SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

Food and Drug

Administration (FDA)

Total food additive

Direct food additive

GRAS food additive

US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material

is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Methylparaben (CAS 99-76-3)

#### **International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Toxic Substances Control Act (TSCA) Inventory

# 16. Other information, including date of preparation or last revision

 Issue date
 07-12-2010

 Revision date
 06-13-2018

 Version #
 03

United States & Puerto Rico

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herein.

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Yes