

Material Safety Data Sheet

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Infosafe No. 1CHL9 Issue Date : October 2007 RE-ISSUED by CHEMSUPP

Product Name : METHYL 4-HYDROXY BENZOATE

Not classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name METHYL 4-HYDROXY BENZOATE

Product Use Antimicrobial agent, inhibition of molds and yeasts and to lesser extent bacteria; as vehicle for ophthalmic solution; food additive (preservative), preservative in cosmetics and some parenteral solutions; in vitro spermicide; in medicaments for pharyngitis and laboratory reagent.

Company Name CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)

Address 5C Bedford Street GILLMAN
SA 5013 Australia

Telephone Tel: (08) 8440-2000

Number/Fax Fax: (08) 8440-2001

Other Names

Name	Product Code
Methyl paraben	
Methyl para-hydroxy benzoate	
METHYL 4-HYDROXY BENZOATE LR	ML019
METHYL 4-HYDROXY BENZOATE BP	MP019

Additional Information Use in foods restricted to 0.1%.
A tolerance of zero is established for residues of methylparaben in milk from dairy animals.

Other Information EMERGENCY CONTACT NUMBER: +61 08 8440 2000
Business hours: 8:30am to 5:00pm, Monday to Friday.

Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Solid

Ingredients	Name	CAS	Proportion	Hazard Symbol	Risk Phrase
	Methyl 4-Hydroxybenzoate	99-76-3	98-100 %		

3. HAZARDS IDENTIFICATION

Irritancy of Product Moderately irritating to eyes as saturated aqueous solution. May be irritating to respiratory system and skin.

Sensitization of Product Promotes allergic sensitization in predisposed persons.

Carcinogenicity Not listed in the IARC Monographs.

Chronic Effects Repeated exposure may cause sensitization dermatitis.

Inhalation May be harmful if inhaled. Inhalation of dust may result in respiratory irritation, sore throat, coughing and difficult breathing.

Ingestion May be harmful if swallowed. May cause gastrointestinal tract irritation. Systemic toxicity appears to be low. Large doses may produce gastric upset, stomach discomfort, nausea and diarrhoea. May affect behaviour/nervous system (ataxia, somnolence, flaccid paralysis without anesthesia).

Skin Skin contact may cause irritation, resulting in redness and itching. Prolonged or repeated skin contact may cause severe and intractable sensitization (contact) dermatitis, in sensitive individuals, an allergic reaction, which becomes evident upon re-exposure to this material. Paraben sensitization may

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Eye occur especially when substance is applied to broken or damaged skin.
May cause moderate eye irritation, redness, pain, tearing and swelling of eyelids from allergic contact dermatitis.

4. FIRST AID MEASURES

Inhalation Remove from exposure, rest and keep warm. If breathing has stopped, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention in severe cases, or if exposure has been great.

Ingestion Rinse mouth thoroughly with water immediately. Give plenty of water to drink. If swallowed, do NOT induce vomiting. Seek medical attention in severe cases, or if large amounts ingested.

Skin Wash affected area thoroughly with copious amounts of running water. Remove contaminated clothing and wash before reuse. Seek medical attention in severe cases, or if irritation develops.

Eye If contact with the eye(s) occur, wash with copious amounts of water for approximately 15 minutes holding eyelids(s) open. Take care not to rinse contaminated water into the non-affected eye. If irritation develops seek medical attention.

First Aid Facilities Maintain eye wash and normal washroom facilities.

Advice to Doctor Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Specific Methods Small fire: Use dry chemical, CO₂, water spray or foam.
Large fire: Use water spray, fog or foam.
If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

Specific Hazards May burn but do not ignite readily. Runoff may pollute waterways. Fire may produce irritating, poisonous and/or corrosive fumes. Containers may explode when heated.

Hazardous Combustion Products Irritating and highly toxic gases, smoke and fumes, including carbon monoxide and carbon dioxide.

Sensitivity to Impact (Shock Sensitivity) Non-flammable and non-explosive in presence of shocks.

Sensitivity to Static Discharge Slightly explosive in presence of open flames and sparks.

Decomposition Temp. 270 - 280 °C

Precautions in connection with Fire Wear SCBA and structural firefighter's uniform.

Ignition Temperature > 600 °C

Flammability Combustible.

Explosion Data Finely dispersed dust in air in sufficient concentrations, and on exposure to an ignition source is a potential dust explosion hazard.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 15m. Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal.
SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

7. HANDLING AND STORAGE

Corrosiveness Non-corrosive in presence of glass, of steel, of stainless steel (304), of stainless steel (316).

Handling Avoid ingestion and inhalation of dusts. Avoid contact with skin and eyes. Minimize dust and aerosol generation and accumulation. Keep container tightly closed. Provide appropriate exhaust ventilation at places where dust is formed. Use with adequate ventilation. If ingested, seek medical advice immediately and show the container or the label. Wear appropriate protective equipment. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Practice good personal hygiene, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet

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facilities. Protect against physical damage. Keep away from incompatibles such as oxidizing agents, alkalis. Employ normal measures for preventive fire protection. Keep away from heat and all sources of ignition. Ground all equipment containing material. Containers of this material pose a fire risk and may be hazardous when empty since they retain product residues (dust, solids); evaporate the residue under a fume hood and observe all warnings and precautions listed for the product.

Storage Store in tightly closed containers, in a cool, dry, well-ventilated area away from incompatible substances. Protect against physical damage, direct sunlight and moisture. Store away from heat, sources of ignition, and oxidising agents. Inspect regularly for deficiencies such as damage or leaks.

Storage Temperatures Store at room temperature (15 to 25 °C recommended).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Other Exposure Information A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by NOHSC Australia for this product. There is a blanket limit of 10 mg/m³ for dusts when limits have not otherwise been established.

Respiratory Protection Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

Eye Protection The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Hand Protection Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: PVC gloves. Plastic or rubber gloves.

Body Protection Clean clothing or protective clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Eng. Controls In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

Hygiene Measures Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Colourless crystals or white, crystalline powder or needles.

Odour Odourless or faint characteristic odour.

Decomposition Temperature 270 - 280 °C

Melting Point 125-128 °C; 131 °C.

Boiling Point 270-280 °C (decomposition)

Solubility in Water Slightly soluble (0.25% (wt/wt) @ 20 °C; 0.30% (wt/wt) @ 25 °C).

Solubility in Organic Solvents Very soluble in alcohol; easily soluble in diethyl ether, acetone; soluble in benzene; slightly soluble in carbon tetrachloride and glycerol (1 g/ 70 ml of warm glycerol).

Specific Gravity (H₂O=1) 1.36

pH Value ~ 5.8 (saturated solution)

Vapour Pressure Negligible.

Evaporation Rate Negligible.

Volatile Component 0 %vol @ 21 °C

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Partition co-efficient, n-octanol/water Log P (o/w): 1.96
Density Bulk Density: ~ 0.3-0.4.
Flammability Combustible.
Ignition Temperature > 600 °C
Explosion Properties Finely dispersed dust in air in sufficient concentrations, and on exposure to an ignition source is a potential dust explosion hazard.
Molecular Weight 152.15
Solubility in Fat Soluble in oils (1 g/ 40 ml of warm oil) and fats.
Burning Characteristics Will readily burn under fire conditions. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.
Other Information Taste: Slight burning taste.

10. STABILITY AND REACTIVITY

Stability Stable under normal temperatures, pressures and conditions of handling and storage.
Hazardous Polymerization Will not occur.
Materials to Avoid Strong oxidising agents and strong bases.
Hazardous Decomposition Products Irritating and highly toxic gases, acrid smoke and fumes, including carbon monoxide and carbon dioxide.
Hazardous Reaction Reactive with oxidizing agents, alkalis.
Conditions to Avoid Heat, flames, ignition sources, dust generation and incompatible materials.

11. TOXICOLOGICAL INFORMATION

Inhalation May be harmful if inhaled. Inhalation of dust may result in respiratory irritation, sore throat, coughing and difficult breathing.
Ingestion May be harmful if swallowed. May cause gastrointestinal tract irritation. Systemic toxicity appears to be low. Large doses may produce gastric upset, stomach discomfort, nausea and diarrhoea. May affect behaviour/nervous system (ataxia, somnolence, flaccid paralysis without anesthesia).
Skin Skin contact may cause irritation, resulting in redness and itching. Prolonged or repeated skin contact may cause severe and intractable sensitization (contact) dermatitis, in sensitive individuals, an allergic reaction, which becomes evident upon re-exposure to this material. Paraben sensitization may occur especially when substance is applied to broken or damaged skin.
Eye May cause moderate eye irritation, redness, pain, tearing and swelling of eyelids from allergic contact dermatitis.
Chronic Effects Repeated exposure may cause sensitization dermatitis.
Carcinogenicity Not listed in the IARC Monographs.
Acute Toxicity - Oral LD50 (mouse) > 8000 mg/kg; Remarks: Peripheral Nerve and Sensation: Flaccid paralysis without anesthesia (usually neuromuscular blockage). Behavioural: Ataxia;
LD50 (rat): 2280 mg/kg;
LD50 (rat): 2100 mg/kg; investigated as a mutagen;
LD50 (guinea pig): 3000 mg/kg;
LD50 (rabbit): 6000 mg/kg.
Eye Irritation Eye irritation test (rabbit): No irritation.
Skin Irritation Skin irritation test (rabbit): No irritation.

12. ECOLOGICAL INFORMATION

No ecological problems are to be expected when the product is handled and used with due care and attention.
Environ. Protection Do not allow to enter waters, waste water, or soil!
Mobility Distribution: log P(o/w): 1.96.
Persistence / Degradability Biodegradation: > 90% (closed bottle test) Readily biodegradable.

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Bioaccumulation No appreciable bioaccumulation potential is to be expected (log P(o/w 1-3)).
Acute Toxicity - Fish Leuciscus idus LC0: 50 mg/l.
Acute Toxicity - Bacteria Photobacterium phosphoreum EC50: 53.6 mg/l/30 min.
Other Information Methyl p-hydroxybenzoate (methyl paraben) is exempted from the requirement of a tolerance when used as a preservative, meeting specifications of Food Chemicals Codex: not to exceed 0.1% in formulations, in accordance with good agricultural practice as inert (or occasionally active) ingredients in pesticide formulations applied to animals.

13. DISPOSAL CONSIDERATIONS

Dispose of according to relevant local, state and federal government regulations.

14. TRANSPORT INFORMATION

Storage and Transport Not classified as dangerous.

15. REGULATORY INFORMATION

Poisons Schedule Not Scheduled

16. OTHER INFORMATION

Contact Person/Point Paul McCarthy Ph. (08) 8440 2000 **DISCLAIMER STATEMENT:**
All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. Chem-Supply accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.

Empirical Formula & Structural Formula Empirical Formula: C8-H8-O3.
Structural Formula: HOC6H4CO2CH3.

References Commonwealth Department of Health and Aged Care, 'Standard for the Uniform Scheduling of Drugs and Poisons No. 22', Commonwealth of Australia, Canberra 2007.
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Worksafe Australia, 'Hazardous Substances Information System, 2005'.
Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]', AGPS, Canberra 1994.
Worksafe Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]', AusInfo, Canberra 1995.

User Codes User Field Title User Code
CAS No. 99-76-3

Poisons Schedule Not Scheduled

Molecular Weight 152.15
...End Of MSDS...