

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

078364916

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

078883473

# Material Safety Data Sheet

Product: Biotene Veterinarian Therapeutic Mouthwash

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## 1- Section I - General Information

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MANUFACTURER'S NAME: Laclede, Inc.

EMERGENCY TELEPHONE NUMBER: 1-800-922-5856

ADDRESS (NUMBER, STREET, CITY, STATE, ZIP): 2030 E. University Drive,  
Rancho Dominguez, CA 90220

CHEMICAL NAME AND SYNONYMS: Biotene Veterinarian Mouthwash

TRADE NAME AND SYNONYMS: None

CHEMICAL FAMILY: NA

FORMULA: Mixture

DATE OF PREPARATION: 10/24/03 REVISION DATE: None

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## 2- SECTION II - Hazardous Ingredients

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None

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## 3- Section III - Physical Data

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BOILING POINT: NDA

VAPOR PRESSURE (mm Hg): NDA

VAPOR DENSITY (Air=1): NDA

SPECIFIC GRAVITY (H<sub>2</sub>O=1): 1.058 @ 25°C

PERCENT VOLATILE BY VOLUME (%): NDA

EVAPORATION RATE: NDA

APPEARANCE AND ODOR: Clear liquid

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## 4- Section IV - Fire and Explosion Hazard Data

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FLASH POINT: Not flammable

FLAMMABLE LIMITS: NA  
LEL: NA  
UEL: NA

EXTINGUISHING MEDIA: NA

SPECIAL FIRE FIGHTING PROCEDURES: NA

UNUSUAL FIRE AND EXPLOSION HAZARDS: NA

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5- Section V - Health Hazard Data

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THRESHOLD LIMIT VALUE: NDA

EFFECTS OF OVEREXPOSURE: Eye Contact - Irritation.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes - Flush with water for 30 minutes. Seek medical attention.

Inhalation - Remove to fresh air. Seek medical attention.

Ingestion - Seek medical attention.

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6- Section VI - Reactivity Data

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STABILITY: STABLE

CONDITIONS TO AVOID: Avoid Heat

INCOMPATIBILITY (Materials to Avoid): None

HAZARDOUS DECOMPOSITION PRODUCTS: Not Applicable

HAZARDOUS POLYMERIZATION: Will not occur

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7- Section VII - Spill or Leak Procedures

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Floor may become slippery.

Dilute and clean up with water.

WASTE DISPOSAL METHOD: dispose of container in compliance with all federal, state and local regulations.

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8- Section VIII - Special Protection Information

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RESPIRATORY PROTECTION: No special equipment required.

VENTILATION: Use normal ventilation.

LOCAL EXHAUST: Should be adequate.

MECHANICAL (General): Normal air conditioning.

SPECIAL: Not required.

OTHER: Not required.

PROTECTIVE GLOVES: Usually not required.

EYE PROTECTION: Wear protective glasses or face shield to protect eyes.

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9- Section IX - Special Precautions

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep top on bottle when not in use. Store at room temperature. Keep away from children.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier**

**BIOTENE MOUTHWASH**

**Other means of identification**

**Synonyms**

MFC: LACLEDE 30600064L BIOTENE DRY MOUTH ORAL RINSE \* MFC02600 BIOTENE REGULAR MOUTHWASH EU \* MFC04360 BIOTENE PBF ORAL RINSE / MOUTH WASH WITH OPTAMINT FRUITY BUBBLE \* MFC 04301 \* MFC 04302 \* MFC 04304 \* BIOTENE PBF MOUTHWASH \* FORMULATION CODE 30602574L \* BIOTENE ORIGINAL MOUTHWASH (OPTAMINT PEPPERMINT) \* BIOTENE FLAVOUR FREE MOUTHWASH \* BIOTENE MOUTHWASH 95% BASE \* BIOTENE DRY MOUTH MOUTHWASH \* BIOTENE ORIGINAL ORAL RINSE / MOUTH WASH (S. AROMA CLINICAL) \* BIOTENE ORIGINAL FLAVOUR FREE ORAL RINSE / MOUTH WASH (S. AROMA CLINICAL) \* BIOTENE ORIGINAL ORAL RINSE / MOUTH WASH - 95% BASE (S. AROMA CLINICAL) \* ORAL CARE, FORMULATED PRODUCT

**Recommended use**

Oral Care

**Recommended restrictions**

No other uses are advised.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

GlaxoSmithKline US  
5 Moore Drive  
Research Triangle Park, NC 27709 USA  
US General Information (normal business hours): +1-888-825-5249

Email Address: [msds@gsk.com](mailto:msds@gsk.com)  
Website: [www.gsk.com](http://www.gsk.com)

CHEMTREC EMERGENCY PHONE NUMBERS -  
TRANSPORT EMERGENCIES:  
Customer Number: CCN9484  
US / International toll call +1 703 527 3887  
available 24 hrs/7 days; multi-language response

## 2. Hazard(s) identification

**Classified hazards**

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

**Label elements**

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

**Hazard(s) not otherwise classified (HNOC)**

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

## 3. Composition/information on ingredients

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
PROPYLENE GLYCOL	1,2-PROPANEDIOL 1,2-DIHYDROXYPROPANE 2-HYDROXYPROPANOL ISOPROPYLENE GLYCOL METHYLETHYLENE GLYCOL METHYLETHYL GLYCOL MONOPROPYLENE GLYCOL 2,3-PROPANEDIOL ALPHA-PROPYLENE GLYCOL 1,2-PROPYLENE GLYCOL (RS)-1,2-PROPANEDIOL 1,2-(RS)-PROPANEDIOL 1,2-PROPANDIOL DL-1,2-PROPANEDIOL DL-PROPYLENE GLYCOL PROPANE-1,2-DIOL (PROPYLENE GLYCOL) PROPANE-1-2-DIOL PROPANEDIOL,1,2-	57-55-6	3 - 14
XYLITOL	D-XYLITOL 1,2,3,4,5-PENTAHYDROXYPENTANE KLINIT KYLIT XYLITE XYLITON BP-706	87-99-0	7 - 8
GLYCEROL	GLYCERINE 1,2,3-PROPANETRIOL GLYCYL ALCOHOL TRIHYDROXYPROPANE 1,2,3-TRIHYDROXYPROPANE GLYCERIN, ANHYDROUS GLYCERIN 1,2,3-PROPANTRIOL	56-81-5	0 - 10
SODIUM BENZOATE	BENZOIC ACID, SODIUM SALT BENZOATE OF SODA SODIUM BENZOIC ACID	532-32-1	0.5
MUTANASE			0 - 0.2
OPTAMINT FRUITY BUBBLE MW 413027		Unassigned	< 0.2
BENZOIC ACID	BENZENECARBOXYLIC ACID BENZENEMETHANOIC ACID BENZENEFORMIC ACID BENZOATE CARBOXYBENZENE DRACYLIC ACID PHENYL CARBOXYLIC ACID PHENYLFORMIC ACID PHENYLCARBOXYLIC ACID E 210 HA 1 HA 1(ACID) RETARDEX RETARDER BA SOLVO POWDER TENN-PLAS OHS02720 RTECS DG0875000	65-85-0	< 0.1
CALCIUM LACTATE	PROPANOIC ACID, 2-HYDROXY-, CALCIUM SALT (2:1) LACTIC ACID (2:1), CALCIUM SALT 2-HYDROXYPROPANOIC ACID, CALCIUM SALT (2:1) CALCIUM 2-HYDROXYPROPIONATE CALCIUM LACTATE, ANHYDROUS CALPHOSAN	814-80-2	< 0.1

Chemical name	Common name and synonyms	CAS number	%
DEXTRANASE		9025-70-1	0 - 0.1
GLUCOSE OXIDASE		9001-37-0	< 0.1
LACTOFERRIN			< 0.1
LACTOPEROXIDASE	peroxydase	9003-99-0	< 0.1
LYSOZYME			< 0.1
METHYL PARABEN	GR30517X METHYL P-HYDROXYBENZOATE P-HYDROXYBENZOIC ACID, METHYL ESTER 4-HYDROXYBENZOIC ACID, METHYL ESTER METHYL P-OXYBENZOATE METHYL PARAHYDROXYBENZOATE	99-76-3	0 - 0.1
POTASSIUM THIOCYANATE	POTASSIUM ISOTHIOCYANATE THIOCARA PHODA-NIDE POTASSIUM SULFOCYANATE POTASSIUM RHODANIDE POTASSIUM RHODANATE ATERO-CYN ARTEROCYN KYONATE RHOCYN RODANCA P-317 OHS19640 RTECS XL1925000 166 (GW ACN)	333-20-0	< 0.1
PROPYL PARABEN	PROPYL P-HYDROXYBENZOATE PROTABEN 4-HYDROXYBENZOIC ACID, PROPYL ESTER P-HYDROXYBENZOIC ACID, PROPYL ESTER PASEPTOL PARASEPT PROPYL ASEPTOFORM PROPYL P-OXYBENZOATE	94-13-3	0 - 0.1
SODIUM PHOSPHATE, MONOBASIC	MONOSODIUM PHOSPHATE SODIUM DIHYDROGEN PHOSPHATE MONOSODIUM DIHYDROGEN PHOSPHAT E SODIUM BIPHOSPHATE MONOSODIUM ORTHOPHOSPHATE PHOSPHORIC ACID, MONOSODIUM SALT MONOBASIC SODIUM PHOSPHATE MONOSODIUM HYDROGEN PHOSPHATE SODIUM DIPHOSPHATE ANHYDROUS SODIUM PRIMARY PHOSPHATE SODIUM PHOSPHATE	7558-80-7	< 0.1
ZINC GLUCONATE	BIS(D-GLUCONATO-O(SUP1),O(SUP2)ZIN C ZINC, BIS(D-GLUCONATO-O(SUP1),O (SUP2) GLUCONAL ZN ZINC, BIS(D-GLUCONATO-O(1),O(2))- ZYMIZINC GLUCONIC ACID, ZINC SALT D-GLUCONIC ACID, ZINC COMPLEX	4468-02-4	< 0.1

Other components below reportable levels

70 - < 80

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. If breathing is difficult, trained personnel should give oxygen. Call a physician if symptoms develop or persist. Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
<b>Skin contact</b>	Immediately flush skin with plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if symptoms occur.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Ingestion</b>	If swallowed, rinse mouth with water (only if the person is conscious). If ingestion of a large amount does occur, call a poison control center immediately. Do not induce vomiting without advice from poison control center.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	No specific antidotes are recommended. Treat according to locally accepted protocols. For additional guidance, refer to the current prescribing information or to the local poison control information center.
<b>General information</b>	In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Water.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	This product will support combustion at elevated temperatures.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. No special control measures required for the normal handling of this product. Avoid prolonged exposure. Use care in handling/storage.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep away from heat, sparks and open flame. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### GSK

Components	Type	Value	Form
BENZOIC ACID (CAS 65-85-0)	OHC	2	PROVISIONAL
CALCIUM LACTATE (CAS 814-80-2)	8 HR TWA	5000 mcg/m3	
	OHC	1	
POTASSIUM THIOCYANATE (CAS 333-20-0)	8 HR TWA	5000 mcg/m3	
	OHC	1	
PROPYL PARABEN (CAS 94-13-3)	8 HR TWA	5000 mcg/m3	
	OHC	1	
SODIUM BENZOATE (CAS 532-32-1)	8 HR TWA	5000 mcg/m3	
SODIUM PHOSPHATE, MONOBASIC (CAS 7558-80-7)	OHC	1	
ZINC GLUCONATE (CAS 4468-02-4)	OHC	2	

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
GLYCEROL (CAS 56-81-5)	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

#### US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
PROPYLENE GLYCOL (CAS 57-55-6)	TWA	10 mg/m3	Aerosol.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

#### Exposure guidelines

**Appropriate engineering controls** General ventilation normally adequate.

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

**Eye/face protection** Not normally needed. If contact is likely, safety glasses with side shields are recommended.

#### Skin protection

**Hand protection** Not normally needed. For prolonged or repeated skin contact use suitable protective gloves.

**Other** Not normally needed. Wear suitable protective clothing as protection against splashing or contamination.

**Respiratory protection** No personal respiratory protective equipment normally required. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. For advice on suitable monitoring methods, seek guidance from a qualified environment, health and safety professional.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.  
**Form** Bottle.  
**Color** Not available.

**Odor** Not available.

**Odor threshold** Not available.

<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None known. Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
<b>Skin contact</b>	Health injuries are not known or expected under normal use.
<b>Eye contact</b>	Health injuries are not known or expected under normal use. Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Health injuries are not known or expected under normal use. However, ingestion is not likely to be a primary route of occupational exposure.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

<b>Acute toxicity</b>	Expected to be a low hazard for usual industrial or commercial handling by trained personnel.
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Components	Species	Test Results
METHYL PARABEN (CAS 99-76-3)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Mouse	> 8 g/kg
PROPYL PARABEN (CAS 94-13-3)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
SODIUM PHOSPHATE, MONOBASIC (CAS 7558-80-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	8290 mg/kg
ZINC GLUCONATE (CAS 4468-02-4)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Health injuries are not known or expected under normal use.

**Irritation Corrosion - Skin: P.I.I. value**

ZINC GLUCONATE 0

**Serious eye damage/eye irritation** Health injuries are not known or expected under normal use. Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** No studies have been conducted.

**Skin sensitization** None known. This product is not expected to cause skin sensitization.

**Buehler test**

BENZOIC ACID Result: Negative  
Species: Guinea pig

**Maximisation assay (Magnusson and Kligman)**

BENZOIC ACID Result: Negative  
Species: Guinea pig

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans. Carcinogenic effects are not expected as a result of occupational exposure.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

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

Not regulated.

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

Not listed.

**Reproductive toxicity** Contains no ingredient listed as toxic to reproduction

**Specific target organ toxicity - single exposure** Not assigned.

**Specific target organ toxicity - repeated exposure** Not assigned.

**Aspiration hazard** Not established.

**Further information** Occupational exposure to the substance or mixture may cause adverse effects.

**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.

Components		Species	Test Results
<b>BENZOIC ACID (CAS 65-85-0)</b>			
<i>Acute</i>			
	IC50	Activated sludge	> 1000 mg/l, 3 hours
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Green algae (Scenedesmus quadricauda)	> 10 mg/l, 14 days Static test
Crustacea	EC50	Water flea (Daphnia magna)	500 mg/l, 24 hours
Fish	EC50	Mosquito fish (Juvenile Gambusia affinis)	180 mg/l, 96 hours Static test
Microtox	EC50	Microtox	16.9 mg/l, 30 minutes
<b>METHYL PARABEN (CAS 99-76-3)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	11.2 mg/l, 48 hours
Fish	LC50	Medaka, high-eyes (Oryzias latipes)	59.5 mg/l, 96 hours
<i>Chronic</i>			
Crustacea	NOEC	Water flea (Daphnia magna)	0.2 mg/l, 21 days OECD 211
<b>PROPYLENE GLYCOL (CAS 57-55-6)</b>			
<i>Acute</i>			
	IC50	Activated sludge	> 1000 mg/l, 3 hours
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Green algae (Selenastrum capricornutum)	19000 mg/l, 14 days
	NOEC	Green algae (Selenastrum capricornutum)	15000 mg/l, 14 days
Crustacea	EC50	Daphnia	43500 mg/l, 48 hours
	NOEC	Daphnia	28500 mg/l, 48 hours
Fish	EC50	Fathead minnow (Adult Pimephales promelas)	51400 mg/l, 96 hours Static test
		Rainbow trout (Adult Oncorhynchus mykiss)	51600 mg/l, 96 hours Static test
	NOEC	Fathead minnow (Adult Pimephales promelas)	41000 mg/l, 96 hours Static test
		Rainbow trout (Adult Oncorhynchus mykiss)	42000 mg/l, 96 hours Static test
Microtox	EC50	Microtox	51400 mg/l, 30 minutes
<b>SODIUM BENZOATE (CAS 532-32-1)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	> 100 mg/L, 96 hours Static test
Fish	EC50	Fathead minnow (Juvenile Pimephales promelas)	484 mg/L, 96 hours Flow-through test
<b>SODIUM PHOSPHATE, MONOBASIC (CAS 7558-80-7)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	EC50	Golden ide/orfe (Adult Leuciscus idus)	> 2400 mg/l, 48 hours Static test
		Mosquito fish (Adult Gambusia affinis)	186 mg/l, 96 hours Static test

\* Estimates for product may be based on additional component data not shown.

#### Persistence and degradability

## Photolysis

### Half-life (Photolysis-aqueous)

PROPYLENE GLYCOL 1.3 - 2.3 Years Estimated

### Half-life (Photolysis-atmospheric)

BENZOIC ACID < 2 Days Estimated

PROPYLENE GLYCOL 32 Hours Estimated

### UV/visible spectrum wavelength

BENZOIC ACID 279 nm

## Biodegradability

### Percent degradation (Aerobic biodegradation-inherent)

BENZOIC ACID > 90 %, 2 days Modified Zahn-Wellens, Activated sludge

PROPYLENE GLYCOL 62 %, 5 days BOD5, Activated sludge

79 %, 20 Days BOD20, Activated sludge

82 %, 14 days BOD 14, Activated sludge

XYLITOL

### Percent degradation (Aerobic biodegradation-ready)

METHYL PARABEN 89 % , 28 days, OECD 301B

SODIUM BENZOATE 100 %, 28 days Modified OECD Screening Test (OECD 301E), Sea water

90 %, 7 days Modified Sturm test., Activated sludge

### Percent degradation (Aerobic biodegradation-soil)

BENZOIC ACID 50 %, 7 days

### Percent degradation (Anaerobic biodegradation)

PROPYLENE GLYCOL 100 %, 9 days

SODIUM BENZOATE 93 %, 7 days Other degradation test system, Mixed Residential/Industrial

## Bioaccumulative potential

### Partition coefficient n-octanol / water (log Kow)

BENZOIC ACID 1.87

GLYCEROL -1.76

METHYL PARABEN 1.96

PROPYL PARABEN 3.04

PROPYLENE GLYCOL -1.35

SODIUM BENZOATE 1.89

### Bioconcentration factor (BCF)

PROPYLENE GLYCOL < 1 Estimated

## Mobility in soil

### Adsorption

#### Soil/sediment sorption - log Koc

BENZOIC ACID 2.26 Measured

SODIUM BENZOATE 1.16 Calculated

## Mobility in general

### Volatility

#### Henry's law

BENZOIC ACID 0 atm m<sup>3</sup>/mol Estimated

PROPYLENE GLYCOL 0 atm m<sup>3</sup>/mol Estimated

### Distribution

#### Octanol/water distribution coefficient log DOW

PROPYL PARABEN 3.04

**Other adverse effects** Not available.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not discharge into drains, water courses or onto the ground. Dispose in accordance with all applicable regulations.

**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** Dispose of in accordance with local regulations. 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). Avoid discharge into water courses or onto the ground.

**Contaminated packaging**

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport information****DOT**

Not regulated as a dangerous good.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**15. Regulatory information****US federal regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

BENZOIC ACID (CAS 65-85-0)

Listed.

ZINC GLUCONATE (CAS 4468-02-4)

Listed.

**SARA 304 Emergency release notification**

Not regulated.

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

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Immediate Hazard - No

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**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.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

GLYCEROL (CAS 56-81-5)

Other Flavoring Substances with OSHA PEL's

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

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

METHYL PARABEN (CAS 99-76-3)

PROPYL PARABEN (CAS 94-13-3)

**US. Massachusetts RTK - Substance List**

BENZOIC ACID (CAS 65-85-0)

GLYCEROL (CAS 56-81-5)

**US. New Jersey Worker and Community Right-to-Know Act**

BENZOIC ACID (CAS 65-85-0)  
 GLYCEROL (CAS 56-81-5)  
 PROPYLENE GLYCOL (CAS 57-55-6)  
 ZINC GLUCONATE (CAS 4468-02-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**

BENZOIC ACID (CAS 65-85-0)  
 GLYCEROL (CAS 56-81-5)  
 PROPYLENE GLYCOL (CAS 57-55-6)

**US. Rhode Island RTK**

BENZOIC ACID (CAS 65-85-0)  
 ZINC GLUCONATE (CAS 4468-02-4)

**US. California Proposition 65**

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.

**International Inventories**

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

\*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).

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

<b>Issue date</b>	12-04-2013
<b>Revision date</b>	09-23-2016
<b>Version #</b>	06
<b>Further information</b>	HMIS® is a registered trade and service mark of the ACA.
<b>HMIS® ratings</b>	Health: 1 Flammability: 1 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 1 Instability: 0
<b>References</b>	GSK Hazard Determination
<b>Disclaimer</b>	The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.
<b>Revision information</b>	This document has undergone significant changes and should be reviewed in its entirety.