

## 1. Identification

**Product identifier**

**BIOTENE MOUTHWASH**

**Other means of identification**

**Synonyms**

MFC: LACLEDE 30600064L BIOTENE DRY MOUTH ORAL RINSE \* MFC03665 BIOTENE ORIGINAL ORAL RINSE / MOUTH WASH \* 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

This safety data sheet is written to provide health, safety and environmental information for people handling this formulated product in the workplace. It is not intended to provide information relevant to medicinal use of the product. In this instance patients should consult prescribing information/package insert/product label or consult their pharmacist or physician. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate safety data sheet for each ingredient.

**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)  
EMERGENCY PHONE NUMBERS -  
TRANSPORT EMERGENCIES::  
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 *<br>1,2-DIHYDROXYPROPANE *<br>2-HYDROXYPROPANOL *<br>ISOPROPYLENE GLYCOL *<br>METHYLETHYLENE GLYCOL *<br>METHYLETHYL GLYCOL *<br>MONOPROPYLENE GLYCOL *<br>2,3-PROPANEDIOL * ALPHA-PROPYLENE<br>GLYCOL * 1,2-PROPYLENE GLYCOL *<br>(RS)-1,2-PROPANEDIOL *<br>1,2-(RS)-PROPANEDIOL *<br>1,2-PROPANDIOL * DL-1,2-PROPANEDIOL<br>* DL-PROPYLENE GLYCOL *<br>PROPANE-1,2-DIOL (PROPYLENE<br>GLYCOL) * PROPANE-1-2-DIOL *<br>PROPANEDIOL,1,2- | 57-55-6    | 3 - 14  |
| XYLITOL                             | D-XYLITOL *<br>1,2,3,4,5-PENTAHYDROXPENTANE *<br>KLINIT * KYLIT * XYLITE * XYLITON *<br>BP-706  | 87-99-0    | 7 - 8   |
| GLYCEROL                            | GLYCERINE * 1,2,3-PROPANETRIOL *<br>GLYCYL ALCOHOL *<br>TRIHYDROXYPROPANE *<br>1,2,3-TRIHYDROXYPROPANE *<br>GLYCERIN, ANHYDROUS * GLYCERIN *<br>1,2,3-PROPANTRIOL   | 56-81-5    | 0 - 10  |
| SODIUM BENZOATE                     | BENZOIC ACID, SODIUM SALT *<br>BENZOATE OF SODA * SODIUM BENZOIC<br>ACID  | 532-32-1   | 0.5     |
| MUTANASE                            |   |            | 0 - 0.2 |
| OPTAMINT FRUITY BUBBLE MW<br>413027 |   | Unassigned | < 0.2   |
| BENZOIC ACID                        | BENZENECARBOXYLIC ACID *<br>BENZENEMETHANOIC ACID *<br>BENZENEFORMIC ACID * BENZOATE *<br>CARBOXYBENZENE * DRACYLIC ACID *<br>PHENYL CARBOXYLIC ACID *<br>PHENYLFORMIC ACID *<br>PHENYL CARBOXYLIC ACID * E 210 * HA 1<br>* HA 1 (ACID) * RETARDEX * RETARDER<br>BA * SOLVO POWDER * TENN-PLAS *<br>OHS02720 * RTECS DG0875000  | 65-85-0    | < 0.1   |
| CALCIUM LACTATE                     | PROPANOIC ACID, 2-HYDROXY-,<br>CALCIUM SALT (2:1) * LACTIC ACID (2:1),<br>CALCIUM SALT * 2-HYDROXYPROPANOIC<br>ACID, CALCIUM SALT (2:1) * CALCIUM<br>2-HYDROXYPROPIONATE * CALCIUM<br>LACTATE, ANHYDROUS * CALPHOSAN  | 814-80-2   | < 0.1   |
| DEXTRANASE                          |   | 9025-70-1  | 0 - 0.1 |
| GLUCOSE OXIDASE                     |   | 9001-37-0  | < 0.1   |
| LACTOFERRIN                         |   |            | < 0.1   |
| LACTOPEROXIDASE                     |   | 9003-99-0  | < 0.1   |
| LYSOZYME                            |   |            | < 0.1   |
| METHYL PARABEN                      | GR30517X * METHYL<br>P-HYDROXYBENZOATE *<br>P-HYDROXYBENZOIC ACID, METHYL<br>ESTER * 4-HYDROXYBENZOIC ACID,<br>METHYL ESTER * METHYL<br>P-OXYBENZOATE * METHYL<br>PARAHYDROXYBENZOATE   | 99-76-3    | 0 - 0.1 |

| Chemical name                            | Common name and synonyms   | CAS number | %       |
|--|--|------------|---------|
| POTASSIUM THIOCYANATE                    | POTASSIUM ISOTHIOCYANATE *<br>THIOCARA * PHODA-NIDE * POTASSIUM<br>SULFOCYANATE * POTASSIUM<br>RHODANIDE * POTASSIUM RHODANATE *<br>ATERO-CYN * ARTEROCYN * KYONATE *<br>RHOCYN * RODANCA * P-317 * OHS19640<br>* RTECS XL1925000 * 166 (GW ACN)   | 333-20-0   | < 0.1   |
| PROPYL PARABEN                           | PROPYL P-HYDROXYBENZOATE *<br>PROTABEN * 4-HYDROXYBENZOIC ACID,<br>PROPYL ESTER * P-HYDROXYBENZOIC<br>ACID, PROPYL ESTER * PASEPTOL *<br>PARASEPT * PROPYL ASEPTOFORM *<br>PROPYL P-OXYBENZOATE  | 94-13-3    | 0 - 0.1 |
| SODIUM PHOSPHATE,<br>MONOBASIC           | MONOSODIUM PHOSPHATE * SODIUM<br>DIHYDROGEN PHOSPHATE *<br>MONOSODIUM DIHYDROGEN<br>PHOSPHATE * SODIUM BIPHOSPHATE *<br>MONOSODIUM ORTHOPHOSPHATE *<br>PHOSPHORIC ACID, MONOSODIUM SALT<br>* MONOBASIC SODIUM PHOSPHATE *<br>MONOSODIUM HYDROGEN PHOSPHATE<br>* SODIUM DIPHOSPHATE ANHYDROUS *<br>SODIUM PRIMARY PHOSPHATE *<br>SODIUM PHOSPHATE | 7558-80-7  | < 0.1   |
| ZINC GLUCONATE                           | BIS(D-GLUCONATO-O(SUP1),O(SUP2)ZIN<br>C * ZINC,<br>BIS(D-GLUCONATO-O(SUP1),O(SUP2) *<br>GLUCONAL ZN * ZINC,<br>BIS(D-GLUCONATO-O(1),O(2))- *<br>ZYMIZINC * GLUCONIC ACID, ZINC SALT *<br>D-GLUCONIC ACID, ZINC COMPLEX   | 4468-02-4  | < 0.1   |
| Other components below reportable levels |  |            | >65.0   |

\*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>   | Under normal conditions of intended use, this material is not expected to be an inhalation hazard.  |
| <b>Skin contact</b>   | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin.  |
| <b>Eye contact</b>  | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.   |
| <b>Ingestion</b>  | Rinse mouth. Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Not available.  |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. No specific antidotes are recommended. Treat according to locally accepted protocols. For additional guidance, refer to the local poison control information centre.  |
| <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. Wash contaminated clothing before reuse. Pre-placement and periodic health surveillance is not usually indicated. The final determination of the need for health surveillance should be determined by local risk assessment. |

#### 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable extinguishing media</b>               | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |
| <b>Unsuitable extinguishing media</b>             | None known.   |
| <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> | Wear suitable protective equipment. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from the fire area if possible without increased personal risk.   |
| <b>Specific methods</b>  | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.                                     |
| <b>General fire hazards</b>  | This product is non-flammable.  |

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up** Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. 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 in original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground. No special environmental precautions required.

## 7. Handling and storage

**Precautions for safe handling** Do not taste or swallow. Avoid breathing mist or vapor. Avoid contact with skin. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Use care in handling/storage.

**Conditions for safe storage, including any incompatibilities** Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### GSK

| Components                                  | Type            | Value            | Note        |
|---|-----------------|------------------|-------------|
| BENZOIC ACID (CAS 65-85-0)                  | OHC             | 2                | PROVISIONAL |
| CALCIUM LACTATE (CAS 814-80-2)              | 8 HR TWA        | 5000 mcg/m3      |             |
| POTASSIUM THIOCYANATE (CAS 333-20-0)        | OHC<br>8 HR TWA | 1<br>5000 mcg/m3 |             |
| PROPYL PARABEN (CAS 94-13-3)                | OHC<br>8 HR TWA | 1<br>5000 mcg/m3 |             |
| SODIUM BENZOATE (CAS 532-32-1)              | OHC<br>8 HR TWA | 1<br>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<br>15 mg/m3 | Respirable fraction.<br>Total dust. |

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

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

|  |   |
|--|---|
| <b>Biological limit values</b>   | No biological exposure limits noted for the ingredient(s).  |
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
| <b>Individual protection measures, such as personal protective equipment</b> |   |
| <b>Eye/face protection</b>   | Wear approved safety glasses with side shields if eye contact is possible.  |
| <b>Skin protection</b>   |   |
| <b>Hand protection</b>   | Not normally needed.  |
| <b>Other</b>   | No special protective equipment required.   |
| <b>Respiratory protection</b>  | No personal respiratory protective equipment normally required.   |
| <b>Thermal hazards</b>   | Wear appropriate thermal protective clothing, when necessary.   |
| <b>General hygiene considerations</b>  | When using, do not eat, drink or smoke. 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. Contaminated work clothing should not be allowed out of the workplace.  |

**9. Physical and chemical properties**

**Appearance**

|                       |                   |
|-----------------------|-------------------|
| <b>Physical state</b> | Liquid.           |
| <b>Form</b>           | Liquid. Solution. |
| <b>Color</b>          | Not available.    |

**Odor** Not available.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** Expected to be non-flammable based on components present.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

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

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

**Vapor pressure** Not available.

**Vapor density** Not available.

**Relative density** Not available.

**Solubility(ies)**

**Solubility (water)** Not available.

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Other information**

**VOC (Weight %)** 18.9173 % Switzerland estimated

## 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | Not available.   |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.  |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur. |
| <b>Conditions to avoid</b>                | Contact with incompatible materials.   |
| <b>Incompatible materials</b>             | Strong oxidizing agents.   |
| <b>Hazardous decomposition products</b>   | Irritating and/or toxic fumes and gases may be emitted upon the products decomposition.              |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Prolonged inhalation may be harmful.                        |
| <b>Skin contact</b> | Health injuries are not known or expected under normal use. |
| <b>Eye contact</b>  | May be irritating to eyes.                                  |
| <b>Ingestion</b>    | Health injuries are not known or expected under normal use. |

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Health injuries are not known or expected under normal use.

| <b>Components</b> | <b>Species</b> | <b>Test Results</b> |
|-------------------|----------------|---------------------|
|-------------------|----------------|---------------------|

METHYL PARABEN (CAS 99-76-3)

**Acute**

*Oral*

|      |       |          |
|------|-------|----------|
| LD50 | Mouse | > 8 g/kg |
|------|-------|----------|

PROPYL PARABEN (CAS 94-13-3)

**Acute**

*Oral*

|      |     |              |
|------|-----|--------------|
| LD50 | Rat | > 2000 mg/kg |
|------|-----|--------------|

SODIUM PHOSPHATE, MONOBASIC (CAS 7558-80-7)

**Acute**

*Oral*

|      |     |            |
|------|-----|------------|
| LD50 | Rat | 8290 mg/kg |
|------|-----|------------|

ZINC GLUCONATE (CAS 4468-02-4)

**Acute**

*Oral*

|      |     |              |
|------|-----|--------------|
| 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** May be irritating to eyes.

### Respiratory or skin sensitization

**Respiratory sensitization** Due to partial or complete lack of data the classification is not possible.

**Skin sensitization** Health injuries are not known or expected under normal use.

**Buehler test**

|              |   |
|--------------|---|
| BENZOIC ACID | Result: Negative<br>Species: Guinea pig |
|--------------|---|

**Maximisation assay (Magnusson and Kligman)**

|              |   |
|--------------|---|
| BENZOIC ACID | Result: Negative<br>Species: Guinea pig |
|--------------|---|

|   |  |
|---|--|
| <b>Germ cell mutagenicity</b>   | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| <b>Carcinogenicity</b>  | No components are listed as carcinogens by GSK, IARC, NTP or US OSHA.  |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |  |
| Not listed.   |  |
| <b>Reproductive toxicity</b>  | Contains no ingredient listed as toxic to reproduction   |
| <b>Specific target organ toxicity - single exposure</b>               | None known.  |
| <b>Specific target organ toxicity - repeated exposure</b>             | None known.  |
| <b>Aspiration hazard</b>  | Based on available data, the classification criteria are not met.  |
| <b>Chronic effects</b>  | Prolonged inhalation may be harmful.   |
| <b>Further information</b>  | None known.  |

## 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 |

| Components   | Species                                       | Test Results                         |
|--|---|--------------------------------------|
|  | 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

XYLITOL 82 %, 14 days BOD 14, 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 allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international 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).

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

## 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** MARPOL Annex II applies to liquids used in a ship's operation that pose a threat to the marine environment. These materials may not be transported in bulk.

## 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 listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

Not listed.

**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>          | 11-12-2014  |
| <b>Revision date</b>       | 11-12-2014  |
| <b>Version #</b>           | 05  |
| <b>Further information</b> | HMIS® is a registered trade and service mark of the NPCA. |
| <b>HMIS® ratings</b>       | Health: 2<br>Flammability: 0<br>Physical hazard: 0        |
| <b>NFPA ratings</b>        | Health: 2<br>Flammability: 0<br>Instability: 0            |
| <b>References</b>          | GSK Hazard Determination                                  |

**Disclaimer**

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.

**Revision Information**

Product and Company Identification: Synonyms  
Composition / Information on Ingredients: Undisclosed Ingredient Statement  
First-aid measures: Most important symptoms/effects, acute and delayed  
Toxicological information: Inhalation  
Toxicological information: Skin contact  
Regulatory Information: United States  
Other information, including date of preparation or last revision: References