1. Identification

Product identifier
BIOTENE TOOTHPASTE

Other means of identification
Synonyms
BIOTENE GEL TOOTHPASTE * MFC: LACLEDE 30401172L * BIOTENE PBF TOOTHPASTE * MFC: LACLEDE 30402652L * BIOTENE REGULAR TOOTHPASTE (EU) * MFC 02599 * PROJECT BIONIC * SODIUM MONOFLUOROPHOSPHATE, 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
Website: 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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLYCEROL</td>
<td>GLYCERIN ANHYDROUS * GLYCERINE * GLYCERITOL * GLYCYL ALCOHOL * 1,2,3-PROPANETRIOL * PROPA</td>
<td>56-81-5</td>
<td>20 - &lt; 30</td>
</tr>
<tr>
<td></td>
<td>NETROLI * GLYCOL * GLYCOSANIN * TRHYDROXYPROPANE * 1,2,3-TRIHYDROXYPROPANE * OSMOGLYN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SILICA, AMORPHOUS HYDRATED</td>
<td>SILICON DIOXIDE HYDRATE * SILICA, HYDRATE * HYDRATED AMORPHOUS SILICA * Zeodent 113 * Ze</td>
<td>10279-57-9</td>
<td>3 - &lt; 5</td>
</tr>
<tr>
<td></td>
<td>edent 153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SILICON DIOXIDE</td>
<td>SILICA * SILICA GEL * AMORPHOUS SILICA * DIATOMACEOUS EARTH * INFUSORIAL EART</td>
<td>7631-86-9</td>
<td>1 - &lt; 3</td>
</tr>
<tr>
<td></td>
<td>H * CAB-O-SIL M-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZEODENT 113</td>
<td></td>
<td>112926-00-8</td>
<td>1 - &lt; 3</td>
</tr>
<tr>
<td>DI-SODIUM FLUOROPHOSPHATE</td>
<td>DISODIUM FLUOROPHOSPHATE * DISODIUM MONOFLUOROPHOSPHATE * DISODIUM PHOSPHOROFURO</td>
<td>10163-15-2</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td>FLORIDATE * SODIUM FLUOROPHOSPHATE (NA2PO3F) * SODIUM PHOSPHOROFUROFLORIDATE * SODIUM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHOSPHOROFUROFLURIDATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical name</td>
<td>Common name and synonyms</td>
<td>CAS number</td>
<td>%</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td>----</td>
</tr>
<tr>
<td>SODIUM BENZOATE</td>
<td>BENZOIC ACID, SODIUM SALT * BENZOATE OF SODA * SODIUM BENZOIC ACID</td>
<td>532-32-1</td>
<td>0.11</td>
</tr>
<tr>
<td>BRILLIANT BLUE FCF</td>
<td>BENZENEMETHANAMINIMIUM, N-ETHYL-N-(4-(4-(ETHYL(3-SULFOPHENYL)METHYLENE)-2,5-CYCLOHEXAD IEN-1-YLIDENE)-3- SULFO-, HYDROXIDE, INNER SALT, DISODIUM SALT * C.I. 42090 * ALPHAZURINE * FD&amp;C BLUE NO.1 * ERIOGLAUCINE</td>
<td>3844-45-9</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>CALCIUM LACTATE</td>
<td>PROPAANOIC 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</td>
<td>814-80-2</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>DEXTRANASE</td>
<td>Unassigned</td>
<td></td>
<td>0 - 0.1</td>
</tr>
<tr>
<td>MENTHOL</td>
<td>HEXAHYDROTHYMOL * MENTHACAMPHOR * MENTHOMENTHOL * PEPPERMINT CAMPHOR * NATURAL MENTHOL</td>
<td>89-78-1</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>MUTANASE</td>
<td></td>
<td>0 - 0.1</td>
<td></td>
</tr>
<tr>
<td>LACTOFERRIN</td>
<td></td>
<td>&lt;0.04</td>
<td></td>
</tr>
<tr>
<td>LACTOPEROXIDASE</td>
<td></td>
<td>9003-99-0</td>
<td>&lt;0.04</td>
</tr>
<tr>
<td>POTASSIUM THIOCYANATE</td>
<td>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)</td>
<td>333-20-0</td>
<td>0.02</td>
</tr>
<tr>
<td>GLUCOSE OXIDASE</td>
<td></td>
<td>&lt;0.02</td>
<td></td>
</tr>
<tr>
<td>LYSOZYME</td>
<td></td>
<td>&lt;0.02</td>
<td></td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td>60 - &lt; 70</td>
<td></td>
</tr>
</tbody>
</table>

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

### 4. First-aid measures

#### Inhalation
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

#### Skin contact
Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops and persists.

#### Eye contact
Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

#### Ingestion
Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Most important symptoms/effects, acute and delayed
Direct contact with eyes may cause temporary irritation.

#### Indication of immediate medical attention and special treatment needed
Treat according to locally accepted protocols. For additional guidance, refer to the current prescribing information or to the local poison control information centre.

#### General information
In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). 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

#### Suitable extinguishing media
Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

#### Unsuitable extinguishing media
None known.
Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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. Collect spillage. 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.

Environmental precautions
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling
Avoid prolonged exposure. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
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

<table>
<thead>
<tr>
<th>GSK Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRILLIANT BLUE FCF (CAS 3844-45-9)</td>
<td>OHC</td>
<td>3</td>
</tr>
<tr>
<td>CALCIUM LACTATE (CAS 814-80-2)</td>
<td>8 HR TWA</td>
<td>5000 mcg/m3</td>
</tr>
<tr>
<td>MENTHOL (CAS 89-78-1)</td>
<td>OHC</td>
<td>1</td>
</tr>
<tr>
<td>POTASSIUM THIOCYANATE (CAS 333-20-0)</td>
<td>8 HR TWA</td>
<td>1000 mcg/m3</td>
</tr>
<tr>
<td>SODIUM BENZOATE (CAS 532-32-1)</td>
<td>OHC</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>8 HR TWA</td>
<td>5000 mcg/m3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM MONOFUOROPHOSPHATE TE (CAS 10163-15-2)</td>
<td>PEL</td>
<td>2.5 mg/m3</td>
<td></td>
</tr>
<tr>
<td>GLYCERIN (CAS 56-81-5)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

US. OSHA Table Z-2 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM MONOFUOROPHOSPHATE TE (CAS 10163-15-2)</td>
<td>TWA</td>
<td>2.5 mg/m3</td>
<td>Dust.</td>
</tr>
</tbody>
</table>

US. OSHA Table Z-3 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICA, AMORPHOUS HYDRATED (CAS 10279-57-9)</td>
<td>TWA</td>
<td>0.8 mg/m3</td>
</tr>
</tbody>
</table>
US. OSHA Table Z-3 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICON DIOXIDE (CAS 7631-86-9)</td>
<td>TWA</td>
<td>20 millions of particle 0.8 mg/m³</td>
</tr>
<tr>
<td>ZEODENT 113 (CAS 112926-00-8)</td>
<td>TWA</td>
<td>20 mppcf 0.8 mg/m³</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM MONOFLUOROPHOSPHATE (CAS 10163-15-2)</td>
<td>TWA</td>
<td>2.5 mg/m³</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM MONOFLUOROPHOSPHATE (CAS 10163-15-2)</td>
<td>TWA</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>SILICA, AMORPHOUS HYDRATED (CAS 10279-57-9)</td>
<td>TWA</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>SILICON DIOXIDE (CAS 7631-86-9)</td>
<td>TWA</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>ZEODENT 113 (CAS 112926-00-8)</td>
<td>TWA</td>
<td>6 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

<table>
<thead>
<tr>
<th>ACGIH Biological Exposure Indices</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM MONOFLUOROPHOSPHATE (CAS 10163-15-2)</td>
<td>3 mg/l</td>
<td>Fluoride</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>2 mg/l</td>
<td>Fluoride</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Appropriate engineering controls

No special ventilation requirements. 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.

Other

Not normally needed.

Respiratory protection

No personal respiratory protective equipment normally required.

Thermal hazards

Not available.

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

Paste.

Color

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 Not available.
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
Percent volatile 39.6 % estimated
VOC (Weight %) 22.24 % Switzerland estimated

10. Stability and reactivity
Reactivity Not available.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Conditions to avoid Contact with incompatible materials.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products None known. Irritating and/or toxic fumes and gases may be emitted upon the products decomposition.

11. Toxicological information
Information on likely routes of exposure
Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact Health injuries are not known or expected under normal use.
Eye contact Direct contact with eyes may cause temporary irritation.
Ingestion 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.
Components | Species | Test Results
--- | --- | ---
BRILLIANT BLUE FCF (CAS 3844-45-9) |  |  
**Acute** |  |  
Oral | Rat | 11.3 g/kg
LD50 |  |  
GLYCERIN (CAS 56-81-5) |  |  
**Acute** |  |  
Oral | Rat | > 2000 mg/kg
LD50 |  |  
MENTHOL (CAS 89-78-1) |  |  
**Acute** |  |  
Oral | Rat | 3200 mg/kg
LD50 |  |  
* 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**

MENTHOL | 0, Literature data
Result: Irritating to skin
Species: Rabbit
Notes: IUCLID data

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

**Eye**

MENTHOL | 0, Literature data
Result: Mild-moderate
Species: Rabbit

**Respiratory or skin sensitization** Not available.

**Respiratory sensitization**

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

**Sensitization**

MENTHOL | Buehler assay, Literature data
Result: Negative
Species: Guinea pig
Notes: IUCLID data

Epidemiology, Literature data
Result: Low incidence of contact hypersensitivity.
Notes: IUCLID data

Modified Draize, Literature data
Result: Positive
Species: Guinea pig
Notes: IUCLID data

Open repetitive dermal test, Literature data
Result: Negative
Species: Guinea pig
Notes: IUCLID data

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

**Mutagenicity**

MENTHOL | 725 mg/kg In vivo-In vitro Replicative DNA synthesis
Result: Positive
Species: Rat

Alkaline Elution Assay In Vitro, Literature data
Result: Negative
Notes: IUCLID data

Ames, Literature dataLiterature data
Result: Negative
Notes: IUCLID data

BlueScreen mammalian cell mutation assay, Literature data
Result: Negative
Notes: IUCLID data
Mutagenicity

MENTHOL
Chromosomal Aberration Assay In Vitro, CHO cells, Literature data
Result: Negative
Notes: IUCLID data
Chromosomal Aberration Assay In Vitro, human lymphocytes, Literature data
Result: Negative
Notes: IUCLID data
GreenScreen mammalian cell mutation assay, Literature data
Result: Negative
Notes: IUCLID data
L5178Y mouse lymphoma thymidine kinase locus assay, Literature data
Result: Negative
Notes: IUCLID data
Micronucleus Test, Literature data
Result: Negative
Species: Mouse
Notes: IUCLID data
Mutation in Drosophila melanogaster, Literature data
Result: Negative
Notes: IUCLID data
sister chromatid exchange, Literature data
Result: Negative
Notes: IUCLID data

Carcinogenicity

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

<= 1000 mg/kg/day, Literature data, dietary study.
Result: Negative
Species: Rat
Test Duration: 103 weeks
Notes: IUCLID data
<= 2143 mg/kg/day, Literature data, dietary study.
Result: Negative
Species: Mouse
Notes: IUCLID data
IARC Monographs. Overall Evaluation of Carcinogenicity
BRILLIANT BLUE FCF (CAS 3844-45-9) 3 Not classifiable as to carcinogenicity to humans.
SILICA, AMORPHOUS HYDRATED (CAS 10279-57-9) 3 Not classifiable as to carcinogenicity to humans.
SILICON DIOXIDE (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.
ZEODENT 113 (CAS 112926-00-8) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Reproductivity

MENTHOL
185 mg/kg/day Embryo-foetal development, Literature data
Result: NOAEL-Highest dose.
Species: Mouse
Notes: IUCLID data
218 mg/kg/day Embryo-foetal development - Oral, Literature data
Result: NOAEL-Highest dose.
Species: Rat
Notes: IUCLID data
405 mg/kg/day Embryo-foetal development - Oral, Literature data
Result: NOAEL-Highest dose.
Species: Hamster
Notes: IUCLID data
475 mg/kg/day Embryo-foetal development - Oral, Literature data
Result: NOAEL-Highest dose.
Species: Rabbit
Notes: IUCLID data

Specific target organ toxicity - single exposure
None known.
Specific target organ toxicity - repeated exposure

Aspiration hazard

Further information

None known.

Not available.

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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRILLIANT BLUE FCF (CAS 3844-45-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 Water flea (Daphnia magna)</td>
<td>&gt; 97 mg/l, 48 hours Static test</td>
</tr>
<tr>
<td>Fish</td>
<td>EC50 Bluegill sunfish (Adult Lepomis macrochirus)</td>
<td>&gt; 96 mg/l, 96 hours Static test</td>
</tr>
<tr>
<td></td>
<td>Rainbow trout (Adult Oncorhynchus mykiss)</td>
<td>&gt; 96 mg/l, 96 hours Static test</td>
</tr>
<tr>
<td>SILICON DIOXIDE (CAS 7631-86-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>EC50 Green algae (Selenastrum capricornutum)</td>
<td>440 mg/l, 72 hours</td>
</tr>
<tr>
<td></td>
<td>NOEC Green algae (Selenastrum capricornutum)</td>
<td>60 mg/l, 72 hours</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 Water flea (Daphnia magna)</td>
<td>&gt; 10000 mg/l, 24 hours Static test</td>
</tr>
<tr>
<td>Fish</td>
<td>EC50 Common carp (Juvenile Cyprinus carpio)</td>
<td>&gt; 10000 mg/l, 72 hours</td>
</tr>
<tr>
<td></td>
<td>Zebra fish (Adult Brachydanio rerio)</td>
<td>5000 mg/l, 96 hours Static test</td>
</tr>
<tr>
<td>Microtox</td>
<td>EC50 Microtox</td>
<td>8700 mg/l, 15 minutes</td>
</tr>
<tr>
<td>SODIUM BENZOATE (CAS 532-32-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 Water flea (Daphnia magna)</td>
<td>&gt; 100 mg/L, 96 hours Static test</td>
</tr>
<tr>
<td>Fish</td>
<td>EC50 Fathead minnow (Juvenile Pimephales promelas)</td>
<td>484 mg/L, 96 hours Flow-through test</td>
</tr>
</tbody>
</table>

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

Persistence and degradability

No data is available on the degradability of this product.

Biodegradability

Percent degradation (Anaerobic biodegradation)

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

Bioaccumulative potential

No data available.

Partition coefficient n-octanol / water (log Kow)

GLYCERIN -1.76
MENTHOL 3.4
SODIUM BENZOATE 1.89

Mobility in soil

No data available.

Adsorption

Soil/sediment sorption - log Koc

SODIUM BENZOATE 1.16 Calculated

Mobility in general

Not available.

Volatility

Henry’s law
MENTHOL 0.000015 atm m^3/mol, 25 C Estimated
13. Disposal considerations

**Disposal instructions**
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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)**
  Not listed.

- **SARA 304 Emergency release notification**
  Not regulated.

  Not listed.

**Supervision 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.
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**

- BRILLIANT BLUE FCF (CAS 3844-45-9)
- GLYCERIN (CAS 56-81-5)
- SILICA, AMORPHOUS HYDRATED (CAS 10279-57-9)
- SILICON DIOXIDE (CAS 7631-86-9)
- ZEODENT 113 (CAS 112926-00-8)

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

- DI-SODIUM FLUOROPHOSPHATE (CAS 10163-15-2)
- GLYCERIN (CAS 56-81-5)
- SILICON DIOXIDE (CAS 7631-86-9)
- ZEODENT 113 (CAS 112926-00-8)

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

- DI-SODIUM FLUOROPHOSPHATE (CAS 10163-15-2)
- GLYCERIN (CAS 56-81-5)
- SILICA, AMORPHOUS HYDRATED (CAS 10279-57-9)
- SILICON DIOXIDE (CAS 7631-86-9)

**US. Rhode Island RTK**

Not regulated.

**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

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

*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

- **Issue date**: 11-07-2014
- **Revision date**: 11-07-2014
- **Version #**: 02
- **Further information**: HMIS® is a registered trade and service mark of the NPCA.
- **HMIS® ratings**
  - Health: 1
  - Flammability: 0
  - Physical hazard: 0
- **NFPA ratings**
  - Health: 1
  - Flammability: 0
  - Instability: 0
- **References**: 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

Composition / Information on Ingredients: Undisclosed Ingredient Statement