

## 1. Identification

### Product identifier

**SENSODYNE TOOTHPASTE (WITH STANNOUS FLUORIDE)**

### Other means of identification

#### Synonyms

MFC04108 SENSODYNE REPAIR AND PROTECT \* MFC04109 SENSODYNE REPAIR AND PROTECT \* MFC04186 SENSODYNE COMPLETE PROTECTION EXTRA FRESH (STANNOUS FLUORIDE) \* MFC04209 SENSODYNE REPAIR AND PROTECT WHITENING (STANNOUS FLUORIDE) \* MFC04325 SENSODYNE COMPLETE PROTECTION (STANNOUS FLUORIDE) \* MFC04498 SENSODYNE COMPLETE PROTECTION WITH STANNOUS FLUORIDE \* MFC04499 SENSODYNE COMPLETE PROTECTION EXTRA FRESH WITH STANNOUS FLUORIDE \* STANNOUS FLUORIDE, 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)  
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 | %       |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|
| GLYCERIN      | GLYCEROL * GLYCERIN ANHYDROUS *<br>GLYCERINE * GLYCERITOL * GLYCYL<br>ALCOHOL * 1,2,3-PROPANETRIOL *<br>PROPANETRIOL * GLYROL * GLYSANIN *<br>TRIHIDROXYPROPANE *<br>1,2,3-TRIHIDROXYPROPANE *<br>OSMOGLYN | 56-81-5    | 50 - 60 |

| Chemical name                            | Common name and synonyms                                                                                                                                                                                                                                                                                                                                      | CAS number | %         |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| POLYETHYLENE GLYCOL 400                  | PEG 400 *<br>ALPHA-HYDRO-OMEGA-HYDROXY-POLY(OXY-1,2-ETHANEDIYL) * PEG *<br>CARBOWAX * POLYOXYETHYLENE 400 *<br>CARBOWAX POLYETHYLENE GLYCOL 400 * CARBOWAX PEG 400 * OHS19121 *<br>RTECS TQ3675000 * GLYCOLS, POLYETHYLENE *<br>POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-HYDRO-.OMEGA. *<br>POLYETHYLENEGLYCOL 6000 *<br>POLYETHYLENGLYKOLE (PEG) (MOLMASSE 200-600) | 25322-68-3 | 10 - < 20 |
| SIDENT                                   |                                                                                                                                                                                                                                                                                                                                                               | 7631-86-9  | 5 - 10    |
| ZEODENT 124                              |                                                                                                                                                                                                                                                                                                                                                               | 7631-86-9  | 5 - < 10  |
| SODIUM TRIPOLYPHOSPHATE                  | TRIPHOSPHORIC ACID, PENTASODIUM SALT * PENTASODIUM TRIPHOSPHATE *<br>PENTASODIUM TRIPOLYPHOSPHATE *<br>SODIUM TRIPHOSPHATE * SODIUM POLYPHOSPHATE * SODIUM PHOSPHATE                                                                                                                                                                                          | 7758-29-4  | 3 - 7.5   |
| DODECYL SODIUM SULFATE                   | DODECYL SULFATE, SODIUM SALT *<br>SODIUM LAURYL SULPHATE * LAURYL SULFATE SODIUM SALT                                                                                                                                                                                                                                                                         | 151-21-3   | 0.5 - 1.5 |
| TITANIUM DIOXIDE                         | TITANIUM OXIDE * TITANIUM(IV) OXIDE *<br>TITANIUM PEROXIDE (TiO2) * PIGMENT WHITE 6                                                                                                                                                                                                                                                                           | 13463-67-7 | 0.5 - 1.5 |
| OPTAMINT NORTHERN LIGHT 913844           |                                                                                                                                                                                                                                                                                                                                                               | Unassigned | 0 - 1.2   |
| OPTAMINT TWINKLE                         |                                                                                                                                                                                                                                                                                                                                                               | Unassigned | 0 - 1.2   |
| SENSIDREAM FLAVOR 508915T                |                                                                                                                                                                                                                                                                                                                                                               | Unassigned | 0 - 1.1   |
| CARBOPOL 980                             | CARBOPOL 980 NF POLYMER * ACRYLIC ACID, POLYMERIZED * ACRYLIC ACID POLYMER * CARBOMER                                                                                                                                                                                                                                                                         | 9003-01-4  | 0 - < 1   |
| PERSEE ICE FROST 509090T FLAVOUR         |                                                                                                                                                                                                                                                                                                                                                               |            | < 1       |
| TP 16348 BEKA EC                         |                                                                                                                                                                                                                                                                                                                                                               | Unassigned | < 1       |
| TIN (II) FLUORIDE                        | STANNOUS FLUORIDE * TIN BIFLUORIDE                                                                                                                                                                                                                                                                                                                            | 7783-47-3  | 0.4 - 0.5 |
| COCOAMIDOPROPYL BETAINE                  | COCOAMIDO BETAINE * N-(COCO ALKYL) AMIDO PROPYL DIMETHYL BETAINE *<br>COCONUT OIL AMIDOPROPYL BETAINE                                                                                                                                                                                                                                                         | 61789-40-0 | 0.0 - 0.5 |
| Other components below reportable levels |                                                                                                                                                                                                                                                                                                                                                               |            | <39       |

\*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.                          |

**General information** 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. 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 (CO<sub>2</sub>).

**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** Wear suitable protective equipment.

**Fire fighting equipment/instructions** Use standard firefighting procedures and consider the hazards of other involved materials. 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** Assume that this product is capable of sustaining combustion.

## 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 protective equipment and clothing during clean-up. Avoid inhalation of vapors or mists. 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.

**Methods and materials for containment and cleaning up** Remove sources of ignition.

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. Use water spray to reduce vapors or divert vapor cloud drift. 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. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling** Avoid breathing mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains. No special control measures required for the normal handling of this product. Normal room ventilation is expected to be adequate for routine handling of this product.

**Conditions for safe storage, including any incompatibilities** Store in original tightly closed container. Room temperature - normal conditions. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### GSK

#### Components

#### Type

#### Value

#### Note

COCOAMIDOPROPYL  
BETAINE (CAS  
61789-40-0)

OHC

1

PROVISIONAL

DODECYL SODIUM  
SULFATE (CAS 151-21-3)

OHC

2

SODIUM  
TRIPOLYPHOSPHATE  
(CAS 7758-29-4)

OHC

1

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

| Components                        | Type | Value               | Form                                |
|-----------------------------------|------|---------------------|-------------------------------------|
| GLYCERIN (CAS 56-81-5)            | PEL  | 5 mg/m3<br>15 mg/m3 | Respirable fraction.<br>Total dust. |
| TITANIUM DIOXIDE (CAS 13463-67-7) | PEL  | 15 mg/m3            | Total dust.                         |

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

| Components                        | Type | Value     | Form  |
|-----------------------------------|------|-----------|-------|
| TIN (II) FLUORIDE (CAS 7783-47-3) | TWA  | 2.5 mg/m3 | Dust. |

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

| Components                  | Type | Value                 |
|-----------------------------|------|-----------------------|
| SIDENT (CAS 7631-86-9)      | TWA  | 0.8 mg/m3<br>20 mppcf |
| ZEODENT 124 (CAS 7631-86-9) | TWA  | 0.8 mg/m3<br>20 mppcf |

**US. ACGIH Threshold Limit Values**

| Components                        | Type | Value    |
|-----------------------------------|------|----------|
| TITANIUM DIOXIDE (CAS 13463-67-7) | TWA  | 10 mg/m3 |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                  | Type | Value   |
|-----------------------------|------|---------|
| SIDENT (CAS 7631-86-9)      | TWA  | 6 mg/m3 |
| ZEODENT 124 (CAS 7631-86-9) | TWA  | 6 mg/m3 |

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

| Components                               | Type | Value    | Form         |
|------------------------------------------|------|----------|--------------|
| POLYETHYLENE GLYCOL 400 (CAS 25322-68-3) | TWA  | 10 mg/m3 | Particulate. |

**Biological limit values****ACGIH Biological Exposure Indices**

| Components                        | Value  | Determinant | Specimen | Sampling Time |
|-----------------------------------|--------|-------------|----------|---------------|
| TIN (II) FLUORIDE (CAS 7783-47-3) | 3 mg/l | Fluoride    | Urine    | *             |
|                                   | 2 mg/l | Fluoride    | Urine    | *             |

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

**Appropriate engineering controls**

General ventilation normally adequate. An Exposure Control Approach (ECA) is established for operations involving this material based upon the OEL/Occupational Hazard Category and the outcome of a site- or operation-specific risk assessment.

**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. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**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**

|                                                     |                |
|-----------------------------------------------------|----------------|
| <b>Physical state</b>                               | Liquid.        |
| <b>Form</b>                                         | Paste.         |
| <b>Color</b>                                        | Not available. |
| <b>Odor</b>                                         | Not available. |
| <b>Odor threshold</b>                               | 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 available. |
| <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. |

## 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.                                                     |
| <b>Conditions to avoid</b>                | Contact with incompatible materials. None under normal conditions.                                              |
| <b>Incompatible materials</b>             | Strong oxidizing agents. Fluorine. Chlorine.                                                                    |
| <b>Hazardous decomposition products</b>   | Toxic, corrosive or flammable thermal decomposition products are expected when the material is exposed to fire. |

## 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. May be harmful if swallowed. 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. |
|-----------------------|-----------------------------------------------------------------------------------------------|

| Components                               | Species    | Test Results                                                                                                                                      |
|------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| CARBOPOL 980 (CAS 9003-01-4)             |            |                                                                                                                                                   |
| <b>Acute</b>                             |            |                                                                                                                                                   |
| <i>Oral</i>                              |            |                                                                                                                                                   |
| LD50                                     | Rat        | 2500 mg/kg                                                                                                                                        |
| <b>Chronic</b>                           |            |                                                                                                                                                   |
| <i>Inhalation</i>                        |            |                                                                                                                                                   |
| LOEC                                     | Rat        | 0.2 mg/m3 2 y                                                                                                                                     |
| NOAEL                                    | Rat        | 0.05 mg/m3 2 y                                                                                                                                    |
| COCOAMIDOPROPYL BETAINE (CAS 61789-40-0) |            |                                                                                                                                                   |
| <b>Acute</b>                             |            |                                                                                                                                                   |
| <i>Oral</i>                              |            |                                                                                                                                                   |
| LD50                                     | Mouse      | > 2000 mg/kg                                                                                                                                      |
| DODECYL SODIUM SULFATE (CAS 151-21-3)    |            |                                                                                                                                                   |
| <b>Acute</b>                             |            |                                                                                                                                                   |
| <i>Oral</i>                              |            |                                                                                                                                                   |
| LD50                                     | Rat        | 1288 mg/kg                                                                                                                                        |
| GLYCERIN (CAS 56-81-5)                   |            |                                                                                                                                                   |
| <b>Acute</b>                             |            |                                                                                                                                                   |
| <i>Oral</i>                              |            |                                                                                                                                                   |
| LD50                                     | Rat        | > 2000 mg/kg                                                                                                                                      |
| POLYETHYLENE GLYCOL 400 (CAS 25322-68-3) |            |                                                                                                                                                   |
| <b>Acute</b>                             |            |                                                                                                                                                   |
| <i>Oral</i>                              |            |                                                                                                                                                   |
| LD50                                     | Rat        | 30.2 g/kg                                                                                                                                         |
| SODIUM TRIPOLYPHOSPHATE (CAS 7758-29-4)  |            |                                                                                                                                                   |
| <b>Acute</b>                             |            |                                                                                                                                                   |
| <i>Oral</i>                              |            |                                                                                                                                                   |
| LD50                                     | Rat        | 3120 mg/kg                                                                                                                                        |
| TITANIUM DIOXIDE (CAS 13463-67-7)        |            |                                                                                                                                                   |
| <b>Acute</b>                             |            |                                                                                                                                                   |
| <i>Inhalation</i>                        |            |                                                                                                                                                   |
| LC50                                     | Rat        | 6820 mcg/m3                                                                                                                                       |
| <i>Oral</i>                              |            |                                                                                                                                                   |
| LD50                                     | Rat        | > 24 g/kg                                                                                                                                         |
| <b>Chronic</b>                           |            |                                                                                                                                                   |
| <i>Inhalation</i>                        |            |                                                                                                                                                   |
| LOEC                                     | Rat        | 8.6 mg/m3, 1 years TiO2 accumulated in interstitial macrophages, aggregated interstitial cells and particle laden macrophages in lymphoid tissue. |
| NOAEC                                    | Rat        | 250 mg/m3, 2 years Highest dose<br>5 mg/m3, 24 months                                                                                             |
| <b>Subacute</b>                          |            |                                                                                                                                                   |
| <i>Inhalation</i>                        |            |                                                                                                                                                   |
| LOEL                                     | Rat        | 0.1 - 35 mg/m3, 4 weeks Mild macrophage hyperplasia, no change in bronchio-alveolar lavage fluid.                                                 |
| NOAEC                                    | Guinea pig | 26 mg/m3, 3 weeks No evidence of significant inflammation in respiratory tract.                                                                   |
| <i>Oral</i>                              |            |                                                                                                                                                   |
| NOAEL                                    | Rat        | 100000 ppm, 14 Day Dietary study, highest dose tested.                                                                                            |

| Components                                                                   | Species                                                                                                                                                                                                                                                                                                                                                                                                              | Test Results                                                                                      |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Subchronic</b><br><i>Inhalation</i><br>LOEC                               | Rat                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.2 - 20 mg/m3, 8 min Accumulation of TiO2 in macrophages and evidence of pulmonary inflammation. |
| * Estimates for product may be based on additional component data not shown. |                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                   |
| <b>Skin corrosion/irritation</b>                                             | Health injuries are not known or expected under normal use.                                                                                                                                                                                                                                                                                                                                                          |                                                                                                   |
| <b>Irritation Corrosion - Skin</b><br>TITANIUM DIOXIDE                       | 0, Literature data<br>Result: Non-irritant<br>Species: Guinea pig<br>0, Literature data<br>Result: Non-irritant<br>Species: Human<br>Acute dermal irritation; OECD 404, Literature data<br>Result: Non-irritant<br>Species: Rabbit                                                                                                                                                                                   |                                                                                                   |
| <b>Serious eye damage/eye irritation</b>                                     | Health injuries are not known or expected under normal use. Direct contact with eyes may cause temporary irritation.                                                                                                                                                                                                                                                                                                 |                                                                                                   |
| <b>Eye</b><br>TITANIUM DIOXIDE                                               | OECD 405, Literature data<br>Result: Mild irritant<br>Species: Rabbit                                                                                                                                                                                                                                                                                                                                                |                                                                                                   |
| <b>Respiratory or skin sensitization</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                   |
| <b>Respiratory sensitization</b>                                             | No studies have been conducted.                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                   |
| <b>Skin sensitization</b>                                                    | None known. This product is not expected to cause skin sensitization.                                                                                                                                                                                                                                                                                                                                                |                                                                                                   |
| <b>Sensitization</b><br>TITANIUM DIOXIDE                                     | 5 % Optimisation Test, Literature data - Vehicle: petrolatum<br>Result: Negative<br>Species: Guinea pig<br>Test Duration: 48 hour exposure<br>Patch test, Literature data<br>Result: Negative<br>Species: Human                                                                                                                                                                                                      |                                                                                                   |
| <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>Mutagenicity</b><br>TITANIUM DIOXIDE                                      | Ames, Literature data<br>Result: Negative<br>Micronucleus Assay in vitro, CHO cells, Literature data<br>Result: Negative<br>Micronucleus Assay in vitro, cultured human peripheral lymphocytes, Literature data<br>Result: Positive<br>Syrian Hamster Embryo (SHE) cell transformation assay<br>Result: Negative<br>WIL2-NS HPRT/ t-Thioguanidine - Human B-Cell lymphoblastoid, Literature data<br>Result: Positive |                                                                                                   |
| <b>Carcinogenicity</b>                                                       | Health injuries are not known or expected under normal use. Titanium Dioxide produced carcinogenic effects in a lifetime study in mice. High concentrations or doses administered over an extended period of time were required to produce adverse effects.                                                                                                                                                          |                                                                                                   |
| TITANIUM DIOXIDE                                                             | 0.5 mg/m3, Literature data<br>Result: Negative<br>Species: Rat<br>Test Duration: 24 months<br>0.72 - 14.8 mg/m3, Literature data<br>Result: Negative<br>Species: Mouse                                                                                                                                                                                                                                               |                                                                                                   |

**Carcinogenicity**  
TITANIUM DIOXIDE

10 - 250 mg/m<sup>3</sup>, Dietary study - Literature data.  
Result: Inflammation at all doses with alveolar/bronchiolar adenoma at the highest concentration.  
Species: Rat  
Test Duration: 24 months  
25000 - 50000 ppm, Dietary study  
Result: Negative  
Species: Mouse  
25000 - 50000 ppm, Dietary study - Literature data.  
Result: Negative  
Species: Rat  
7.2 - 14.8 mg/m<sup>3</sup>, Literature data  
Result: Lung tumour  
Species: Rat  
Test Duration: 24 months

**IARC Monographs. Overall Evaluation of Carcinogenicity**

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| CARBOPOL 980 (CAS 9003-01-4)      | 3 Not classifiable as to carcinogenicity to humans. |
| SIDENT (CAS 7631-86-9)            | 3 Not classifiable as to carcinogenicity to humans. |
| TIN (II) FLUORIDE (CAS 7783-47-3) | 3 Not classifiable as to carcinogenicity to humans. |
| TITANIUM DIOXIDE (CAS 13463-67-7) | 2B Possibly carcinogenic to humans.                 |
| ZEODENT 124 (CAS 7631-86-9)       | 3 Not classifiable as to carcinogenicity to humans. |

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

Not listed.

|                                                           |                                                                              |
|-----------------------------------------------------------|------------------------------------------------------------------------------|
| <b>Reproductive toxicity</b>                              | Contains no ingredient listed as toxic to reproduction.                      |
| <b>Specific target organ toxicity - single exposure</b>   | Not assigned.                                                                |
| <b>Specific target organ toxicity - repeated exposure</b> | Not assigned.                                                                |
| <b>Aspiration hazard</b>                                  | Not established.                                                             |
| <b>Chronic effects</b>                                    | Prolonged inhalation may be harmful.                                         |
| <b>Further information</b>                                | Occupational exposure to the substance or mixture may cause adverse effects. |

**12. Ecological information**

**Ecotoxicity** Contains a substance which causes risk of hazardous effects to the environment.

| Components                               |      | Species                                      | Test Results                                   |
|------------------------------------------|------|----------------------------------------------|------------------------------------------------|
| CARBOPOL 980 (CAS 9003-01-4)             |      |                                              |                                                |
| <b>Aquatic</b>                           |      |                                              |                                                |
| <i>Acute</i>                             |      |                                              |                                                |
| Crustacea                                | EC50 | Water flea (Daphnia magna)                   | 168 - 280 mg/l, 96 hours Static test           |
| Fish                                     | EC50 | Bluegill sunfish (Adult Lepomis macrochirus) | 580 - 2000 mg/l, 96 hours Static test          |
| COCOAMIDOPROPYL BETAINE (CAS 61789-40-0) |      |                                              |                                                |
| <b>Aquatic</b>                           |      |                                              |                                                |
| <i>Acute</i>                             |      |                                              |                                                |
| Algae                                    | EC50 | Green algae (Scenedesmus subspicatus)        | 0.55 mg/l, 96 hours                            |
|                                          | NOEC | Green algae (Scenedesmus subspicatus)        | 0.09 mg/l, 96 hours                            |
| Crustacea                                | EC50 | Water flea (Daphnia magna)                   | 6.5 mg/l, 48 hours                             |
|                                          | NOEC | Water flea (Daphnia magna)                   | 1.6 mg/l, 48 hours                             |
| Fish                                     | EC50 | Zebra fish (Adult Brachydanio rerio)         | 2 mg/l, 96 hours semi-static test conditions   |
|                                          | NOEC | Zebra fish (Adult Brachydanio rerio)         | 1.7 mg/l, 96 hours semi-static test conditions |
| Microtox                                 | MIC  | Pseudomonas                                  | > 3000 mg/l, 16 hours                          |



| Components                               |      | Species                                     | Test Results                         |
|------------------------------------------|------|---------------------------------------------|--------------------------------------|
| <i>Chronic</i>                           |      |                                             |                                      |
| Crustacea                                | LOEC | Water flea (Daphnia magna)                  | 3.6 mg/l, 21 days                    |
|                                          | NOEC | Water flea (Daphnia magna)                  | 0.9 mg/l, 21 days                    |
| DODECYL SODIUM SULFATE (CAS 151-21-3)    |      |                                             |                                      |
| <b>Aquatic</b>                           |      |                                             |                                      |
| <i>Acute</i>                             |      |                                             |                                      |
| Crustacea                                | EC50 | Water flea (Daphnia magna)                  | 5.4 mg/l, 48 hours Static test       |
| Fish                                     | EC50 | Rainbow trout (Adult Oncorhyncus mykiss)    | 4.6 mg/l, 96 hours Flow-through test |
| <i>Chronic</i>                           |      |                                             |                                      |
| Algae                                    | NOEC | Green algae (Desmodesmus subspicatus)       | 30 mg/l, 72 hours                    |
| Crustacea                                | NOEC | Ceriodaphnia dubia                          | 0.88 mg/l, 7 days Flow-thought Test  |
| Fish                                     | NOEC | Fathead minnow (Pimephales promelas)        | 3.8 mg/l, 28 days Flow-through test  |
| POLYETHYLENE GLYCOL 400 (CAS 25322-68-3) |      |                                             |                                      |
| <b>Aquatic</b>                           |      |                                             |                                      |
| <i>Acute</i>                             |      |                                             |                                      |
| Crustacea                                | EC50 | Water flea (Daphnia magna)                  | 53000 mg/l, 48 hours                 |
| Fish                                     | EC50 | Fathead minnow (Adult Pimephales promelas)  | 87000 mg/l, 96 hours                 |
| Microtox                                 | EC50 | Microtox                                    | 100000 mg/l, 15 minutes              |
| SIDENT (CAS 7631-86-9)                   |      |                                             |                                      |
| <b>Aquatic</b>                           |      |                                             |                                      |
| <i>Acute</i>                             |      |                                             |                                      |
| Crustacea                                | NOEC | Water flea (Daphnia magna)                  | > 10000 mg/l, 24 hours               |
| Fish                                     | NOEC | Zebra fish (Adult Brachydanio rerio)        | > 10000 mg/l, 96 hours               |
| SODIUM TRIPOLYPHOSPHATE (CAS 7758-29-4)  |      |                                             |                                      |
| <i>Acute</i>                             |      |                                             |                                      |
|                                          | IC50 | Activated sludge                            | > 1000 mg/l, 3 hours                 |
| <b>Aquatic</b>                           |      |                                             |                                      |
| <i>Acute</i>                             |      |                                             |                                      |
| Algae                                    | EC50 | Algae                                       | 60 - 120 mg/l                        |
| Crustacea                                | EC50 | Water flea (Daphnia magna)                  | 1089 mg/l, 50 hours                  |
| Fish                                     | EC50 | Golden ide/orfe (Adult Leuciscus idus)      | 1650 mg/l, 48 hours                  |
|                                          |      | Orange-red killfish (Adult Oryzias latipes) | 590 mg/l, 48 hours Static test       |
| TITANIUM DIOXIDE (CAS 13463-67-7)        |      |                                             |                                      |
| <b>Aquatic</b>                           |      |                                             |                                      |
| <i>Acute</i>                             |      |                                             |                                      |
| Crustacea                                | EC50 | Water flea (Daphnia magna)                  | > 1000 mg/l, 48 hours Static test    |

\* 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 (Aerobic biodegradation-inherent)

COCOAMIDOPROPYL BETAINE 97 %, 28 days Modified Zahn-Wellens, DOC removal, Activated sludge  
99 %, 28 days Modified Zahn-Wellens, DOC removal, Activated sludge

POLYETHYLENE GLYCOL 400 40.2 - 70 %, 20 Days BOD20

#### Bioaccumulative potential

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

DODECYL SODIUM SULFATE

1.6

GLYCERIN

-1.76

**Mobility in soil**

Not available.

**Other adverse effects**

Not available.

**13. Disposal considerations****Disposal instructions**

Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. 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). 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.

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

Not regulated as a dangerous good.

Read safety instructions, SDS and emergency procedures before handling.

**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)**

SODIUM TRIPOLYPHOSPHATE (CAS 7758-29-4)

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 - Yes  
Fire Hazard - Yes  
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

GLYCERIN (CAS 56-81-5)  
SIDENT (CAS 7631-86-9)  
SODIUM TRIPOLYPHOSPHATE (CAS 7758-29-4)  
TITANIUM DIOXIDE (CAS 13463-67-7)  
ZEODENT 124 (CAS 7631-86-9)

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

GLYCERIN (CAS 56-81-5)  
SIDENT (CAS 7631-86-9)  
TIN (II) FLUORIDE (CAS 7783-47-3)  
TITANIUM DIOXIDE (CAS 13463-67-7)  
ZEODENT 124 (CAS 7631-86-9)

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

GLYCERIN (CAS 56-81-5)  
SIDENT (CAS 7631-86-9)  
SODIUM TRIPOLYPHOSPHATE (CAS 7758-29-4)  
TIN (II) FLUORIDE (CAS 7783-47-3)  
TITANIUM DIOXIDE (CAS 13463-67-7)  
ZEODENT 124 (CAS 7631-86-9)

##### US. Rhode Island RTK

SODIUM TRIPOLYPHOSPHATE (CAS 7758-29-4)

##### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

##### US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

TITANIUM DIOXIDE (CAS 13463-67-7) Listed: September 2, 2011

#### 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

|                     |                                                           |
|---------------------|-----------------------------------------------------------|
| Issue date          | 05-04-2015                                                |
| Revision date       | 05-04-2015                                                |
| Version #           | 08                                                        |
| Further information | HMIS® is a registered trade and service mark of the NPCA. |
| HMIS® ratings       | Health: 1*<br>Flammability: 1<br>Physical hazard: 0       |

**NFPA ratings**

Health: 1  
Flammability: 1  
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**

This document has undergone significant changes and should be reviewed in its entirety.