

# Material Safety Data Sheet



Issuing Date: 26-Apr-2012

Revision Date: 26-Apr-2012

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                             |  |
|-----------------------------|--|
| <b>Product ID:</b>          | 92061445   |
| <b>Product Name</b>         | Nioxin Cleanser System   |
| <b>Recommended use</b>      | Personal Beauty Care Product   |
| <b>Uses advised against</b> | All other uses   |
| <b>Synonyms</b>             | Nioxin Cleanser System 1 (92061445) * Nioxin Cleanser 2 (92061451) * Nioxin Cleanser 3 (99426531) * Nioxin Cleanser 4 (92046875) * Nioxin Cleanser 5 (99473379) * Nioxin Cleanser 6 (99473380) |
| <b>Manufacturer</b>         | The Procter & Gamble Company<br>Sharon Woods Technical Center<br>11510 Reed Hartman Highway<br>Cincinnati OH 45202.  |
| <b>E-mail Address</b>       | pgsds.im@pg.com.   |
| <b>Emergency telephone</b>  | Transportation (24 HR)<br>CHEMTREC - 1-800-424-9300<br>(U.S./ Canada) or 1-703-527-3887<br>Mexico toll free in country: 01-800-681-9531.   |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Irritating to eyes

|                                     |  |
|-------------------------------------|--|
| <b>OSHA Regulatory Status</b>       | This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)                             |
| <b>WHMIS</b>                        | Not subject to WHMIS classification  |
| <b>Principle Routes of Exposure</b> | Eye contact. Skin contact.   |
| <b>General Hazards</b>              | This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name  | CAS-No     | Weight % |
|--|------------|----------|
| Poly(oxy-1,2-ethanediyl),<br>alpha-sulfo-omega-(dodecyloxy)-, sodium salt (1:1)                  | 9004-82-4  | 5 - 10   |
| Sulfuric acid monododecyl ester sodium salt (1:1)  | 151-21-3   | 3 - 7    |
| 1-Propanaminium,<br>3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco<br>acyl derivs., inner salts | 61789-40-0 | 1 - 5    |
| Citric acid  | 77-92-9    | 1 - 5    |
| Laureth-3  | 3055-94-5  | 0.1 - 1  |
| Sodium hydroxide (Na(OH))  | 1310-73-2  | 0.1 - 1  |
| Mentha Arvensis Oil  | 68917-18-0 | 0.1 - 1  |
| 1,2,3-Propanetriol   | 56-81-5    | < 0.1    |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water.   |
| <b>Inhalation</b>   | Not an expected route of exposure.   |
| <b>Protection of First-aiders</b>                         | Use personal protective equipment.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Flash Point</b>                                    | Not applicable  |
| <b>Suitable Extinguishing Media</b>                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.            |
| <b>Unsuitable Extinguishing Media</b>                 | No information available.   |
| <b>Special Hazard</b>                                 | None in particular  |
| <b>Special protective equipment for fire-fighters</b> | As in any fire, wear self-contained breathing apparatus and full protective gear. |

## 6. ACCIDENTAL RELEASE MEASURES

|  |  |
|--|--|
| <b>Personal precautions</b>            | None under normal use conditions.            |
| <b>Advice for emergency responders</b> | Use personal protective equipment.           |
| <b>Environmental precautions</b>       | Should not be released into the environment. |
| <b>Methods for Containment</b>         | No information available.                    |
| <b>Methods for Cleaning up</b>         | No information available.                    |

## 7. HANDLING AND STORAGE

|  |  |
|--|--|
| <b>Advice on safe handling</b>               | Keep out of the reach of children. Observe label precautions.  |
| <b>Technical measures/Storage conditions</b> | Keep out of the reach of children. Keep container tightly closed in a dry and well-ventilated place. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name             | ACGIH TLV  | OSHA PEL   | NIOSH IDLH   | Mexico OEL                          |
|---------------------------|--|--|--|-------------------------------------|
| Sodium hydroxide (Na(OH)) | Ceiling: 2 mg/m <sup>3</sup>                       | TWA: 2 mg/m <sup>3</sup><br>(vacated) Ceiling: 2 mg/m <sup>3</sup>   | IDLH: 10 mg/m <sup>3</sup><br>Ceiling: 2 mg/m <sup>3</sup> | Mexico: Ceiling 2 mg/m <sup>3</sup> |
| 1,2,3-Propanetriol        | TWA: 10 mg/m <sup>3</sup> mist                     | TWA: 15 mg/m <sup>3</sup> mist, total particulate<br>TWA: 5 mg/m <sup>3</sup> mist, respirable fraction<br>(vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate<br>(vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction |  | Mexico: TWA 10 mg/m <sup>3</sup>    |
| Chemical Name             | British Columbia                                   | Alberta  | Quebec   | Ontario TWAEV                       |
| Sodium hydroxide (Na(OH)) | Ceiling: 2 mg/m <sup>3</sup>                       | Ceiling: 2 mg/m <sup>3</sup>   | Ceiling: 2 mg/m <sup>3</sup>                               | CEV: 2 mg/m <sup>3</sup>            |
| 1,2,3-Propanetriol        | TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup>  | TWA: 10 mg/m <sup>3</sup>                                  | TWA: 10 mg/m <sup>3</sup>           |

**Engineering Measures** Not applicable

### Personal Protective Equipment

|                                 |   |
|---------------------------------|---|
| <b>Eye Protection</b>           | No special protective equipment required. |
| <b>Hand Protection</b>          | No special protective equipment required. |
| <b>Skin and body protection</b> | No special protective equipment required. |
| <b>Respiratory protection</b>   | No special protective equipment required  |
| <b>Thermal hazards</b>          | Not applicable.                           |

**Hygiene measures** Avoid contact with skin, eyes and clothing.

**Environmental Exposure Controls** No special environmental precautions required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State @20°C** liquid  
**Appearance** viscous liquid  
 blue (cleansers 1 -4)  
 clear (cleansers 5, 6)  
**Odor** Mint-like, Fruity

| <u>Property</u>                               | <u>Values</u>            | <u>Note</u> |
|---|--------------------------|-------------|
| <b>pH VALUE</b>                               | 4.6 - 5.2                | .           |
| <b>Melting/freezing point</b>                 | Not applicable           | .           |
| <b>Boiling point/boiling range</b>            | 100 °C                   | .           |
| <b>Flash Point</b>                            | Not applicable           | .           |
| <b>Evaporation rate</b>                       | No information available | .           |
| <b>Flammability (solid, gas)</b>              | No information available | .           |
| <b>Flammability Limits in Air</b>             |                          | .           |
| <b>upper flammability limit</b>               | No information available | .           |
| <b>lower flammability limit</b>               | No information available | .           |
| <b>Vapor pressure</b>                         | No information available | .           |
| <b>Vapor density</b>                          | Not applicable           | .           |
| <b>Relative density</b>                       | 1.0                      | .           |
| <b>Water solubility</b>                       | Soluble in water         | .           |
| <b>Solubility in other solvents</b>           | No information available | .           |
| <b>Partition coefficient: n-octanol/water</b> | No information available | .           |
| <b>Autoignition temperature</b>               | No information available | .           |
| <b>Decomposition temperature</b>              | No information available | .           |
| <b>Viscosity of Product</b>                   | No information available | .           |
| <b>Bulk Density</b>                           | No information available | .           |

| Chemical Name                                     | logPow         |
|---|----------------|
| Sulfuric acid monododecyl ester sodium salt (1:1) | 1.6            |
| Citric acid                                       | -1.72 at 20 °C |
| Dodecanol (Alcohol C12)                           | 5.36           |
| 1,2,3-Propanetriol                                | -1.76          |

**VOC Content** Products comply with US state and federal regulations for VOC content in consumer products.

## 10. STABILITY AND REACTIVITY

**Reactivity** None under normal use conditions.

**Stability** Stable under normal conditions.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

**Conditions to Avoid** None under normal processing.

**Materials to Avoid** None in particular.

**Hazardous Decomposition Products** None under normal use.

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**11. TOXICOLOGICAL INFORMATION****Acute Toxicity**

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | No known effect based on information supplied. |
| <b>Skin contact</b> | No known effect based on information supplied. |
| <b>Ingestion</b>    | No known effect based on information supplied. |
| <b>Eye contact</b>  | Irritating to eyes.                            |

**Principle Routes of Exposure**      Eye contact. Skin contact.

**Chronic Toxicity**

|                               |   |
|-------------------------------|---|
| <b>Corrosivity</b>            | No known effect.  |
| <b>Sensitization</b>          | No known effect.  |
| <b>Neurological Effects</b>   | No known effect.  |
| <b>Reproductive Toxicity</b>  | The product contains no substances known to be hazardous to health in concentrations which need to be taken into account. |
| <b>Mutagenic Effects</b>      | There are no known mutagenic chemicals in this product.   |
| <b>Developmental Toxicity</b> | No known effect.  |
| <b>Teratogenicity</b>         | No known effect.  |
| <b>Carcinogenicity</b>        | Contains no ingredients above reportable quantities listed as a carcinogen.   |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Acute Toxicity

| Chemical Name  | Toxicity to algae  | Toxicity to fish  | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms |
|--|--|---|----------------------------|---|-----------------------------|
| Sulfuric acid monododecyl ester sodium salt (1:1)  | EC50 72 h = 53 mg/L<br>Desmodesmus subspicatus EC50 96 h 30 - 100 mg/L<br>Desmodesmus subspicatus EC50 96 h = 117 mg/L<br>Pseudokirchneriella subcapitata EC50 96 h 3.59 - 15.6 mg/L<br>Pseudokirchneriella subcapitata static | LC50 96 h 8 - 12.5 mg/L Pimephales promelas static LC50 96 h 15 - 18.9 mg/L<br>Pimephales promelas static LC50 96 h 22.1 - 22.8 mg/L<br>Pimephales promelas static LC50 96 h 4.3 - 8.5 mg/L<br>Oncorhynchus mykiss static LC50 96 h = 4.62 mg/L<br>Oncorhynchus mykiss flow-through LC50 96 h = 4.2 mg/L<br>Oncorhynchus mykiss LC50 96 h = 7.97 mg/L<br>Brachydanio rerio flow-through LC50 96 h 9.9 - 20.1 mg/L<br>Brachydanio rerio semi-static LC50 96 h 4.06 - 5.75 mg/L<br>Lepomis macrochirus static LC50 96 h 4.2 - 4.8 mg/L<br>Lepomis macrochirus flow-through LC50 96 h = 4.5 mg/L<br>Lepomis macrochirus LC50 96 h 5.8 - 7.5 mg/L<br>Pimephales promelas static LC50 96 h 10.2 - 22.5 mg/L<br>Pimephales promelas semi-static LC50 96 h 6.2 - 9.6 mg/L<br>Pimephales promelas LC50 96 h 13.5 - 18.3 mg/L<br>Poecilia reticulata semi-static LC50 96 h 10.8 - 16.6 mg/L<br>Poecilia reticulata static LC50 96 h = 1.31 mg/L<br>Cyprinus carpio semi-static | -                          | EC50 48 h = 1.8 mg/L<br>Daphnia magna = 53 mg/L<br>EC50 30 - 100 mg/L<br>EC50 = 117 mg/L<br>EC50 3.59 - 15.6 mg/L<br>EC50 | -                           |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., inner salts | EC50 72 h 1.0 - 10.0 mg/L<br>Desmodesmus subspicatus EC50 96 h = 0.55 mg/L<br>Desmodesmus subspicatus  | LC50 96 h 1.0 - 10.0 mg/L<br>Brachydanio rerio LC50 96 h = 2 mg/L<br>Brachydanio rerio semi-static  | -                          | EC50 48 h = 6.5 mg/L<br>Daphnia magna 1.0 - 10.0 mg/L<br>EC50 = 0.55 mg/L<br>EC50   | -                           |
| Citric acid  | -  | LC50 96 h = 1516 mg/L<br>Lepomis macrochirus static   | -                          | EC50 72 h = 120 mg/L<br>Daphnia magna   | -                           |

|                           |  |   |   |   |   |
|---------------------------|--|---|---|---|---|
| Sodium hydroxide (Na(OH)) | -  | LC50 96 h = 45.4 mg/L<br>Oncorhynchus mykiss<br>static  | - | -   | - |
| Dodecanol (Alcohol C12)   | EC50 96 h = 0.62 mg/L<br>Desmodesmus subspicatus | LC50 96 h = 1.01 mg/L<br>Pimephales promelas<br>flow-through LC50 96 h = 0.1855 mg/L<br>Pimephales promelas | - | EC50 48 h = 320 mg/L<br>Daphnia magna = 0.62 mg/L<br>EC50 | - |
| 1,2,3-Propanetriol        | -  | LC50 96 h 51 - 57 mL/L<br>Oncorhynchus mykiss static  | - | EC50 24 h > 500 mg/L<br>Daphnia magna                     | - |

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

**Mobility** No information available.

**Other adverse effects** No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste from Residues / Unused Products** **Household:** Do not discharge product into natural waters without pre-treatment or adequate dilution.

**Contaminated packaging** Dispose of in accordance with local regulations.

**14. TRANSPORT INFORMATION**

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**IATA** Not regulated

**ICAO** Not regulated

**IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

- Acute Health Hazard no
- Chronic Health Hazard no
- Fire Hazard no

Sudden Release of Pressure Hazard no  
 Reactive Hazard no

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name             | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ                                     |
|---------------------------|--------------------------|------------------------------------|--|
| Sodium hydroxide (Na(OH)) | 1000 lb                  | -                                  | RQ 1000 lb final RQ RQ 454 kg final RQ |

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name             | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sodium hydroxide (Na(OH)) | 1000 lb                     | -                      | -                         | X                          |

**U.S. State Regulations****California Proposition 65**

This product is not subject to warning labeling under California Proposition 65

**U.S. State Regulations**

| Chemical Name                   | Pennsylvania |
|---------------------------------|--------------|
| Sulfuric acid sodium salt (1:2) | X            |
| Sodium hydroxide (Na(OH))       | X            |

**International Regulations****Canada****WHMIS Hazard Class**

Not subject to WHMIS classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories**

TSCA Exempt  
 DSL Exempt  
 NDSL Exempt



Perfumes contained with the products comply with appropriate IFRA guidance.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

|                              |
|------------------------------|
| <b>16. OTHER INFORMATION</b> |
|------------------------------|

**Issuing Date:** 26-Apr-2012

**Revision Date:** 26-Apr-2012

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of MSDS**

# Material Safety Data Sheet



Issuing Date: 06-Jun-2012

Revision Date: 06-Jun-2012

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product ID:** 92245785

**Product Name** Nioxin Scalp Therapy 1

**Recommended use** Personal Beauty Care Product

**Uses advised against** All other uses

**Synonyms** System 1 Conditioner

**Manufacturer** The Procter & Gamble Company  
Sharon Woods Innovation Center  
11510 Reed Hartman Highway  
Cincinnati OH 45202

**E-mail Address** pgsds.im@pg.com

**Emergency telephone** Transportation (24 HR)  
CHEMTREC - 1-800-424-9300  
(U.S./ Canada) or 1-703-527-3887  
Mexico toll free in country: 01-800-681-9531

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

**OSHA Regulatory Status** Consumer Products as defined by the U.S. Consumer Product Safety Act which are used as intended (typical consumer duration and frequency) are exempt from the OSHA Hazard Communication Standard

**WHMIS** Not subject to WHMIS classification

**Principle Routes of Exposure** Skin contact. Eye contact.

**General Hazards** This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name  | CAS-No     | Weight % |
|--|------------|----------|
| Octadecanamide, N-[3-(dimethylamino)propyl]-                                     | 7651-02-7  | 1 - 5    |
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 61789-80-8 | 0.1 - 1  |
| Mentha Arvensis Oil  | 68917-18-0 | 0.1 - 1  |
| glycerol 1-stearate  | 123-94-4   | 0.1 - 1  |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water.   |
| <b>Inhalation</b>   | Not an expected route of exposure.   |
| <b>Protection of First-aiders</b>                         | Use personal protective equipment.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Flash Point</b>                                    | No information available  |
| <b>Suitable Extinguishing Media</b>                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.            |
| <b>Unsuitable Extinguishing Media</b>                 | No information available.   |
| <b>Special Hazard</b>                                 | None in particular  |
| <b>Special protective equipment for fire-fighters</b> | As in any fire, wear self-contained breathing apparatus and full protective gear. |

## 6. ACCIDENTAL RELEASE MEASURES

|  |  |
|--|--|
| <b>Personal precautions</b>            | Use personal protective equipment.           |
| <b>Advice for emergency responders</b> | Use personal protective equipment.           |
| <b>Environmental precautions</b>       | Should not be released into the environment. |
| <b>Methods for Containment</b>         | No information available.                    |
| <b>Methods for Cleaning up</b>         | No information available.                    |

## 7. HANDLING AND STORAGE

|  |   |
|--|---|
| <b>Advice on safe handling</b>               | Keep out of the reach of children. Observe label precautions.   |
| <b>Technical measures/Storage conditions</b> | Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name       | ACGIH TLV  | OSHA PEL                  | NIOSH IDLH | Mexico OEL                |
|---------------------|--|---------------------------|------------|---------------------------|
| glycerol 1-stearate | TWA: 10 mg/m <sup>3</sup> except stearates of toxic metals | -                         |            | -                         |
| Chemical Name       | British Columbia   | Alberta                   | Quebec     | Ontario TWAEV             |
| glycerol 1-stearate | TWA: 10 mg/m <sup>3</sup>                                  | TWA: 10 mg/m <sup>3</sup> | -          | TWA: 10 mg/m <sup>3</sup> |

**Engineering Measures** Not applicable.

### Personal Protective Equipment

|  |   |
|--|---|
| <b>Eye Protection</b>                  | No special protective equipment required. |
| <b>Hand Protection</b>                 | No special protective equipment required. |
| <b>Skin and body protection</b>        | No special protective equipment required. |
| <b>Respiratory protection</b>          | No special protective equipment required. |
| <b>Thermal hazards</b>                 | Not applicable.                           |
| <b>Hygiene measures</b>                | None under normal use conditions.         |
| <b>Environmental Exposure Controls</b> | See Section 6.                            |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |   |                    |
|---|---|--------------------|
| <b>Physical State @20°C</b>                   | liquid  |                    |
| <b>Appearance</b>                             | blue. viscous liquid .  |                    |
| <b>Odor</b>                                   | Mint-like   |                    |
| <br>  |   |                    |
| <b><u>Property</u></b>                        | <b><u>Values</u></b>  | <b><u>Note</u></b> |
| <b>pH VALUE</b>                               | 5   |                    |
| <b>Melting/freezing point</b>                 | No information available  |                    |
| <b>Boiling point/boiling range</b>            | No information available  |                    |
| <b>Flash Point</b>                            | No information available  |                    |
| <b>Evaporation rate</b>                       | No information available  |                    |
| <b>Flammability (solid, gas)</b>              | No information available  |                    |
| <b>Flammability Limits in Air</b>             |   |                    |
| <b>upper flammability limit</b>               | No information available  |                    |
| <b>lower flammability limit</b>               | No information available  |                    |
| <b>Vapor pressure</b>                         | No information available  |                    |
| <b>Vapor density</b>                          | No information available  |                    |
| <b>Relative density</b>                       | 0.96  |                    |
| <b>Water solubility</b>                       | No information available  |                    |
| <b>Solubility in other solvents</b>           | No information available  |                    |
| <b>Partition coefficient: n-octanol/water</b> | No information available  |                    |
| <b>Autoignition temperature</b>               | No information available  | .                  |
| <b>Decomposition temperature</b>              | No information available  | .                  |
| <b>Viscosity of Product</b>                   | No information available  |                    |
| <b>Bulk Density</b>                           | No information available  |                    |
| <b>VOC Content</b>                            | Products comply with US state and federal regulations for VOC content in consumer products. |                    |

## 10. STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Reactivity</b>                       | None under normal use conditions.        |
| <b>Stability</b>                        | Stable under normal conditions.          |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur. |
| <b>Hazardous Reactions</b>              | None under normal processing.            |
| <b>Conditions to Avoid</b>              | None under normal processing.            |
| <b>Materials to Avoid</b>               | None in particular.                      |
| <b>Hazardous Decomposition Products</b> | None under normal use.                   |

## 11. TOXICOLOGICAL INFORMATION

### Product Information

**Acute Toxicity** Product does not present an acute toxicity hazard based on known or supplied information.

**Principle Routes of Exposure** Skin contact. Eye contact.

**Inhalation** No known effect based on information supplied.

**Skin contact** No known effect based on information supplied.

**Ingestion** No known effect based on information supplied.

**Eye contact** No known effect based on information supplied.

| Chemical Name  | LD50 Oral          | LD50 Dermal        | LC50 Inhalation      |
|--|--------------------|--------------------|----------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 2000 mg/kg ( Rat ) | 2000 mg/kg ( Rat ) | 180 mg/L ( Rat ) 1 h |
| Mentha Arvensis Oil  | 1240 mg/kg ( Rat ) | 5 g/kg ( Rabbit )  | -                    |

### Chronic Toxicity

**Corrosivity** No known effect.

**Sensitization** No known effect.

**Neurological Effects** No known effect.

**Reproductive Toxicity** The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.

**Mutagenic Effects** There are no known mutagenic chemicals in this product.

**Developmental Toxicity** No known effect.

**Teratogenicity** No known effect.

**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Acute Toxicity

| Chemical Name  | Toxicity to algae   | Toxicity to fish                                  | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates                              | Toxicity to other organisms |
|--|---|---|----------------------------|--|-----------------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | EC50 96 h = 0.1 mg/L<br>Desmodesmus subspicatus EC50 72 h = 0.00046 mg/L<br>Pseudokirchneriella subcapitata | LC50 96 h = 1.48 mg/L<br>Brachydanio rerio static | -                          | EC50 48 h = 0.32 mg/L<br>Daphnia magna = 0.1 mg/L<br>EC50 = 0.00046 mg/L<br>EC50 | -                           |

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

| Chemical Name  | Bioconcentration factor (BCF) |
|--|-------------------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 13                            |

**Mobility** No information available.

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste from Residues / Unused Products** Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

### **TDG**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

### **MEX**

**UN/ID No** UN3082  
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s.  
**Hazard class** 9  
**Packing Group** III

**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**IATA**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**ERG Code** 9L  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**ICAO**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**IMDG/IMO**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**EmS No.** F-A, S-F  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | no |
| Chronic Health Hazard             | no |
| Fire Hazard                       | no |
| Sudden Release of Pressure Hazard | no |
| Reactive Hazard                   | no |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ                                      |
|---------------|--------------------------|------------------------------------|---|
| Edetic acid   | 5000 lb                  | -                                  | RQ 5000 lb final RQ RQ 2270 kg final RQ |

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.



**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Edetic acid   | 5000 lb                     | -                      | -                         | X                          |

**U.S. State Regulations****California Proposition 65**

This product is not subject to warning labeling under California Proposition 65

**U.S. State Regulations**

| Chemical Name | Pennsylvania |
|---------------|--------------|
| Edetic acid   | X            |

**International Regulations****Canada****WHMIS Hazard Class**

Not subject to WHMIS classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories**

**TSCA** Exempt

**DSL** Exempt

**NDSL** Exempt

**Perfumes contained with the products comply with appropriate IFRA guidance.**

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

|                              |
|------------------------------|
| <b>16. OTHER INFORMATION</b> |
|------------------------------|

**Issuing Date:** 06-Jun-2012

**Revision Date:** 06-Jun-2012

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of MSDS**

# Material Safety Data Sheet



Issuing Date: 06-Jun-2012

Revision Date: 06-Jun-2012

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                             |   |
|-----------------------------|---|
| <b>Product ID:</b>          | 92245783  |
| <b>Product Name</b>         | Nioxin Scalp Therapy 2  |
| <b>Recommended use</b>      | Personal Beauty Care Product  |
| <b>Uses advised against</b> | All other uses  |
| <b>Synonyms</b>             | System 2 Conditioner  |
| <b>Manufacturer</b>         | The Procter & Gamble Company<br>Sharon Woods Innovation Center<br>11510 Reed Hartman Highway<br>Cincinnati OH 45202                     |
| <b>E-mail Address</b>       | pgsds.im@pg.com   |
| <b>Emergency telephone</b>  | Transportation (24 HR)<br>CHEMTREC - 1-800-424-9300<br>(U.S./ Canada) or 1-703-527-3887<br>Mexico toll free in country: 01-800-681-9531 |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

|                                     |  |
|-------------------------------------|--|
| <b>OSHA Regulatory Status</b>       | Consumer Products as defined by the U.S. Consumer Product Safety Act which are used as intended (typical consumer duration and frequency) are exempt from the OSHA Hazard Communication Standard |
| <b>WHMIS</b>                        | Not subject to WHMIS classification  |
| <b>Principle Routes of Exposure</b> | Skin contact. Eye contact.   |
| <b>General Hazards</b>              | This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use   |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name  | CAS-No     | Weight % |
|--|------------|----------|
| Octadecanamide, N-[3-(dimethylamino)propyl]-                                     | 7651-02-7  | 1 - 5    |
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 61789-80-8 | 0.1 - 1  |
| glycerol 1-stearate  | 123-94-4   | 0.1 - 1  |
| Mentha Arvensis Oil  | 68917-18-0 | 0.1 - 1  |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water.   |
| <b>Inhalation</b>   | Not an expected route of exposure.   |
| <b>Protection of First-aiders</b>                         | Use personal protective equipment.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Flash Point</b>                                    | No information available  |
| <b>Suitable Extinguishing Media</b>                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.            |
| <b>Unsuitable Extinguishing Media</b>                 | No information available.   |
| <b>Special Hazard</b>                                 | None in particular  |
| <b>Special protective equipment for fire-fighters</b> | As in any fire, wear self-contained breathing apparatus and full protective gear. |

## 6. ACCIDENTAL RELEASE MEASURES

|  |  |
|--|--|
| <b>Personal precautions</b>            | Use personal protective equipment.           |
| <b>Advice for emergency responders</b> | Use personal protective equipment.           |
| <b>Environmental precautions</b>       | Should not be released into the environment. |
| <b>Methods for Containment</b>         | No information available.                    |
| <b>Methods for Cleaning up</b>         | No information available.                    |

## 7. HANDLING AND STORAGE

|  |   |
|--|---|
| <b>Advice on safe handling</b>               | Keep out of the reach of children. Observe label precautions.   |
| <b>Technical measures/Storage conditions</b> | Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name       | ACGIH TLV  | OSHA PEL                  | NIOSH IDLH | Mexico OEL                |
|---------------------|--|---------------------------|------------|---------------------------|
| glycerol 1-stearate | TWA: 10 mg/m <sup>3</sup> except stearates of toxic metals | -                         |            | -                         |
| Chemical Name       | British Columbia   | Alberta                   | Quebec     | Ontario TWAEV             |
| glycerol 1-stearate | TWA: 10 mg/m <sup>3</sup>                                  | TWA: 10 mg/m <sup>3</sup> | -          | TWA: 10 mg/m <sup>3</sup> |

**Engineering Measures** Not applicable.

### Personal Protective Equipment

|  |   |
|--|---|
| <b>Eye Protection</b>                  | No special protective equipment required. |
| <b>Hand Protection</b>                 | No special protective equipment required. |
| <b>Skin and body protection</b>        | No special protective equipment required. |
| <b>Respiratory protection</b>          | No special protective equipment required. |
| <b>Thermal hazards</b>                 | Not applicable.                           |
| <b>Hygiene measures</b>                | None under normal use conditions.         |
| <b>Environmental Exposure Controls</b> | See Section 6.                            |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |   |                    |
|---|---|--------------------|
| <b>Physical State @20°C</b>                   | liquid  |                    |
| <b>Appearance</b>                             | viscous liquid .  |                    |
| <b>Odor</b>                                   | Mint-like   |                    |
| <b><u>Property</u></b>                        | <b><u>Values</u></b>  | <b><u>Note</u></b> |
| <b>pH VALUE</b>                               | 5   |                    |
| <b>Melting/freezing point</b>                 | No information available  |                    |
| <b>Boiling point/boiling range</b>            | No information available  |                    |
| <b>Flash Point</b>                            | No information available  |                    |
| <b>Evaporation rate</b>                       | No information available  |                    |
| <b>Flammability (solid, gas)</b>              | No information available  |                    |
| <b>Flammability Limits in Air</b>             |   |                    |
| <b>upper flammability limit</b>               | No information available  |                    |
| <b>lower flammability limit</b>               | No information available  |                    |
| <b>Vapor pressure</b>                         | No information available  |                    |
| <b>Vapor density</b>                          | No information available  |                    |
| <b>Relative density</b>                       | 0.96  |                    |
| <b>Water solubility</b>                       | No information available  |                    |
| <b>Solubility in other solvents</b>           | No information available  |                    |
| <b>Partition coefficient: n-octanol/water</b> | No information available  |                    |
| <b>Autoignition temperature</b>               | No information available  | .                  |
| <b>Decomposition temperature</b>              | No information available  | .                  |
| <b>Viscosity of Product</b>                   | No information available  |                    |
| <b>Bulk Density</b>                           | No information available  |                    |
| <b>VOC Content</b>                            | Products comply with US state and federal regulations for VOC content in consumer products. |                    |

## 10. STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Reactivity</b>                       | None under normal use conditions.        |
| <b>Stability</b>                        | Stable under normal conditions.          |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur. |
| <b>Hazardous Reactions</b>              | None under normal processing.            |
| <b>Conditions to Avoid</b>              | None under normal processing.            |
| <b>Materials to Avoid</b>               | None in particular.                      |
| <b>Hazardous Decomposition Products</b> | None under normal use.                   |

**11. TOXICOLOGICAL INFORMATION**

**Product Information**

**Acute Toxicity** Product does not present an acute toxicity hazard based on known or supplied information.

**Principle Routes of Exposure** Skin contact. Eye contact.

**Inhalation** No known effect based on information supplied.  
**Skin contact** No known effect based on information supplied.  
**Ingestion** No known effect based on information supplied.  
**Eye contact** No known effect based on information supplied.

| Chemical Name  | LD50 Oral          | LD50 Dermal        | LC50 Inhalation      |
|--|--------------------|--------------------|----------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 2000 mg/kg ( Rat ) | 2000 mg/kg ( Rat ) | 180 mg/L ( Rat ) 1 h |
| Mentha Arvensis Oil  | 1240 mg/kg ( Rat ) | 5 g/kg ( Rabbit )  | -                    |

**Chronic Toxicity**

**Corrosivity** No known effect.  
**Sensitization** No known effect.  
**Neurological Effects** No known effect.  
**Reproductive Toxicity** The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.  
**Mutagenic Effects** There are no known mutagenic chemicals in this product.  
**Developmental Toxicity** No known effect.  
**Teratogenicity** No known effect.  
**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Acute Toxicity

| Chemical Name  | Toxicity to algae   | Toxicity to fish                                  | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates                              | Toxicity to other organisms |
|--|---|---|----------------------------|--|-----------------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | EC50 96 h = 0.1 mg/L<br>Desmodesmus subspicatus EC50 72 h = 0.00046 mg/L<br>Pseudokirchneriella subcapitata | LC50 96 h = 1.48 mg/L<br>Brachydanio rerio static | -                          | EC50 48 h = 0.32 mg/L<br>Daphnia magna = 0.1 mg/L<br>EC50 = 0.00046 mg/L<br>EC50 | -                           |

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

| Chemical Name  | Bioconcentration factor (BCF) |
|--|-------------------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 13                            |

**Mobility** No information available.

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste from Residues / Unused Products** Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

### **TDG**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

### **MEX**

**UN/ID No** UN3082  
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s.  
**Hazard class** 9  
**Packing Group** III

**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**IATA**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**ERG Code** 9L  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**ICAO**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**IMDG/IMO**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**EmS No.** F-A, S-F  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

## 15. REGULATORY INFORMATION

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | no |
| Chronic Health Hazard             | no |
| Fire Hazard                       | no |
| Sudden Release of Pressure Hazard | no |
| Reactive Hazard                   | no |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ                                      |
|---------------|--------------------------|------------------------------------|---|
| Edetic acid   | 5000 lb                  | -                                  | RQ 5000 lb final RQ RQ 2270 kg final RQ |

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.



**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Edetic acid   | 5000 lb                     | -                      | -                         | X                          |

**U.S. State Regulations****California Proposition 65**

This product is not subject to warning labeling under California Proposition 65

**U.S. State Regulations**

| Chemical Name | Pennsylvania |
|---------------|--------------|
| Edetic acid   | X            |

**International Regulations****Canada****WHMIS Hazard Class**

Not subject to WHMIS classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories**

**TSCA** Exempt

**DSL** Exempt

**NDSL** Exempt

**Perfumes contained with the products comply with appropriate IFRA guidance.**

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

|                              |
|------------------------------|
| <b>16. OTHER INFORMATION</b> |
|------------------------------|

**Issuing Date:** 06-Jun-2012

**Revision Date:** 06-Jun-2012

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of MSDS**

# Material Safety Data Sheet



Issuing Date: 06-Jun-2012

Revision Date: 06-Jun-2012

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                             |   |
|-----------------------------|---|
| <b>Product ID:</b>          | 92245786  |
| <b>Product Name</b>         | Nioxin Scalp Therapy 3  |
| <b>Recommended use</b>      | Personal Beauty Care Product  |
| <b>Uses advised against</b> | All other uses  |
| <b>Synonyms</b>             | System 3 Conditioner  |
| <b>Manufacturer</b>         | The Procter & Gamble Company<br>Sharon Woods Innovation Center<br>11510 Reed Hartman Highway<br>Cincinnati OH 45202                     |
| <b>E-mail Address</b>       | pgsds.im@pg.com   |
| <b>Emergency telephone</b>  | Transportation (24 HR)<br>CHEMTREC - 1-800-424-9300<br>(U.S./ Canada) or 1-703-527-3887<br>Mexico toll free in country: 01-800-681-9531 |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

|                                     |  |
|-------------------------------------|--|
| <b>OSHA Regulatory Status</b>       | Consumer Products as defined by the U.S. Consumer Product Safety Act which are used as intended (typical consumer duration and frequency) are exempt from the OSHA Hazard Communication Standard |
| <b>WHMIS</b>                        | Not subject to WHMIS classification  |
| <b>Principle Routes of Exposure</b> | Skin contact. Eye contact.   |
| <b>General Hazards</b>              | This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use   |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name  | CAS-No     | Weight % |
|--|------------|----------|
| Octadecanamide, N-[3-(dimethylamino)propyl]-                                     | 7651-02-7  | 1 - 5    |
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 61789-80-8 | 0.1 - 1  |
| Mentha Arvensis Oil  | 68917-18-0 | 0.1 - 1  |
| glycerol 1-stearate  | 123-94-4   | 0.1 - 1  |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water.   |
| <b>Inhalation</b>   | Not an expected route of exposure.   |
| <b>Protection of First-aiders</b>                         | Use personal protective equipment.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Flash Point</b>                                    | No information available  |
| <b>Suitable Extinguishing Media</b>                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.            |
| <b>Unsuitable Extinguishing Media</b>                 | No information available.   |
| <b>Special Hazard</b>                                 | None in particular  |
| <b>Special protective equipment for fire-fighters</b> | As in any fire, wear self-contained breathing apparatus and full protective gear. |

## 6. ACCIDENTAL RELEASE MEASURES

|  |  |
|--|--|
| <b>Personal precautions</b>            | Use personal protective equipment.           |
| <b>Advice for emergency responders</b> | Use personal protective equipment.           |
| <b>Environmental precautions</b>       | Should not be released into the environment. |
| <b>Methods for Containment</b>         | No information available.                    |
| <b>Methods for Cleaning up</b>         | No information available.                    |

## 7. HANDLING AND STORAGE

|  |   |
|--|---|
| <b>Advice on safe handling</b>               | Keep out of the reach of children. Observe label precautions.   |
| <b>Technical measures/Storage conditions</b> | Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name       | ACGIH TLV  | OSHA PEL                  | NIOSH IDLH | Mexico OEL                |
|---------------------|--|---------------------------|------------|---------------------------|
| glycerol 1-stearate | TWA: 10 mg/m <sup>3</sup> except stearates of toxic metals | -                         |            | -                         |
| Chemical Name       | British Columbia   | Alberta                   | Quebec     | Ontario TWAEV             |
| glycerol 1-stearate | TWA: 10 mg/m <sup>3</sup>                                  | TWA: 10 mg/m <sup>3</sup> | -          | TWA: 10 mg/m <sup>3</sup> |

**Engineering Measures** Not applicable.

### Personal Protective Equipment

|  |   |
|--|---|
| <b>Eye Protection</b>                  | No special protective equipment required. |
| <b>Hand Protection</b>                 | No special protective equipment required. |
| <b>Skin and body protection</b>        | No special protective equipment required. |
| <b>Respiratory protection</b>          | No special protective equipment required. |
| <b>Thermal hazards</b>                 | Not applicable.                           |
| <b>Hygiene measures</b>                | None under normal use conditions.         |
| <b>Environmental Exposure Controls</b> | See Section 6.                            |



## 11. TOXICOLOGICAL INFORMATION

### Product Information

**Acute Toxicity** Product does not present an acute toxicity hazard based on known or supplied information.

**Principle Routes of Exposure** Skin contact. Eye contact.

**Inhalation** No known effect based on information supplied.  
**Skin contact** No known effect based on information supplied.  
**Ingestion** No known effect based on information supplied.  
**Eye contact** No known effect based on information supplied.

| Chemical Name  | LD50 Oral          | LD50 Dermal        | LC50 Inhalation      |
|--|--------------------|--------------------|----------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 2000 mg/kg ( Rat ) | 2000 mg/kg ( Rat ) | 180 mg/L ( Rat ) 1 h |
| Mentha Arvensis Oil  | 1240 mg/kg ( Rat ) | 5 g/kg ( Rabbit )  | -                    |

### Chronic Toxicity

**Corrosivity** No known effect.  
**Sensitization** No known effect.  
**Neurological Effects** No known effect.  
**Reproductive Toxicity** The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.  
**Mutagenic Effects** There are no known mutagenic chemicals in this product.  
**Developmental Toxicity** No known effect.  
**Teratogenicity** No known effect.  
**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Acute Toxicity

| Chemical Name  | Toxicity to algae   | Toxicity to fish                                  | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates                              | Toxicity to other organisms |
|--|---|---|----------------------------|--|-----------------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | EC50 96 h = 0.1 mg/L<br>Desmodesmus subspicatus EC50 72 h = 0.00046 mg/L<br>Pseudokirchneriella subcapitata | LC50 96 h = 1.48 mg/L<br>Brachydanio rerio static | -                          | EC50 48 h = 0.32 mg/L<br>Daphnia magna = 0.1 mg/L<br>EC50 = 0.00046 mg/L<br>EC50 | -                           |

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

| Chemical Name  | Bioconcentration factor (BCF) |
|--|-------------------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 13                            |

**Mobility** No information available.

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste from Residues / Unused Products** Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

### TDG

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III

### MEX

**UN/ID No** UN3082  
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s.  
**Hazard class** 9  
**Packing Group** III

**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III

**IATA**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**ERG Code** 9L  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III

**ICAO**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III

**IMDG/IMO**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**EmS No.** F-A, S-F  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | no |
| Chronic Health Hazard             | no |
| Fire Hazard                       | no |
| Sudden Release of Pressure Hazard | no |
| Reactive Hazard                   | no |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ                                      |
|---------------|--------------------------|------------------------------------|---|
| Edetic acid   | 5000 lb                  | -                                  | RQ 5000 lb final RQ RQ 2270 kg final RQ |

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.



**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Edetic acid   | 5000 lb                     | -                      | -                         | X                          |

**U.S. State Regulations****California Proposition 65**

This product is not subject to warning labeling under California Proposition 65

**U.S. State Regulations**

| Chemical Name | Pennsylvania |
|---------------|--------------|
| Edetic acid   | X            |

**International Regulations****Canada****WHMIS Hazard Class**

Not subject to WHMIS classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories**

**TSCA** Exempt

**DSL** Exempt

**NDSL** Exempt

**Perfumes contained with the products comply with appropriate IFRA guidance.**

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

|                              |
|------------------------------|
| <b>16. OTHER INFORMATION</b> |
|------------------------------|

**Issuing Date:** 06-Jun-2012

**Revision Date:** 06-Jun-2012

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of MSDS**

# Material Safety Data Sheet



Issuing Date: 06-Jun-2012

Revision Date: 06-Jun-2012

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                             |   |
|-----------------------------|---|
| <b>Product ID:</b>          | 92245784  |
| <b>Product Name</b>         | Nioxin Scalp Therapy 4  |
| <b>Recommended use</b>      | Personal Beauty Care Product  |
| <b>Uses advised against</b> | All other uses  |
| <b>Synonyms</b>             | System 4 Conditioner  |
| <b>Manufacturer</b>         | The Procter & Gamble Company<br>Sharon Woods Innovation Center<br>11510 Reed Hartman Highway<br>Cincinnati OH 45202                     |
| <b>E-mail Address</b>       | pgsds.im@pg.com   |
| <b>Emergency telephone</b>  | Transportation (24 HR)<br>CHEMTREC - 1-800-424-9300<br>(U.S./ Canada) or 1-703-527-3887<br>Mexico toll free in country: 01-800-681-9531 |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

|                                     |  |
|-------------------------------------|--|
| <b>OSHA Regulatory Status</b>       | Consumer Products as defined by the U.S. Consumer Product Safety Act which are used as intended (typical consumer duration and frequency) are exempt from the OSHA Hazard Communication Standard |
| <b>WHMIS</b>                        | Not subject to WHMIS classification  |
| <b>Principle Routes of Exposure</b> | Skin contact. Eye contact.   |
| <b>General Hazards</b>              | This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use   |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name  | CAS-No     | Weight % |
|--|------------|----------|
| Octadecanamide, N-[3-(dimethylamino)propyl]-                                     | 7651-02-7  | 1 - 5    |
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 61789-80-8 | 0.1 - 1  |
| glycerol 1-stearate  | 123-94-4   | 0.1 - 1  |
| Mentha Arvensis Oil  | 68917-18-0 | 0.1 - 1  |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water.   |
| <b>Inhalation</b>   | Not an expected route of exposure.   |
| <b>Protection of First-aiders</b>                         | Use personal protective equipment.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Flash Point</b>                                    | No information available  |
| <b>Suitable Extinguishing Media</b>                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.            |
| <b>Unsuitable Extinguishing Media</b>                 | No information available.   |
| <b>Special Hazard</b>                                 | None in particular  |
| <b>Special protective equipment for fire-fighters</b> | As in any fire, wear self-contained breathing apparatus and full protective gear. |

## 6. ACCIDENTAL RELEASE MEASURES

|  |  |
|--|--|
| <b>Personal precautions</b>            | Use personal protective equipment.           |
| <b>Advice for emergency responders</b> | Use personal protective equipment.           |
| <b>Environmental precautions</b>       | Should not be released into the environment. |
| <b>Methods for Containment</b>         | No information available.                    |
| <b>Methods for Cleaning up</b>         | No information available.                    |

## 7. HANDLING AND STORAGE

|  |   |
|--|---|
| <b>Advice on safe handling</b>               | Keep out of the reach of children. Observe label precautions.   |
| <b>Technical measures/Storage conditions</b> | Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name       | ACGIH TLV  | OSHA PEL                  | NIOSH IDLH | Mexico OEL                |
|---------------------|--|---------------------------|------------|---------------------------|
| glycerol 1-stearate | TWA: 10 mg/m <sup>3</sup> except stearates of toxic metals | -                         |            | -                         |
| Chemical Name       | British Columbia   | Alberta                   | Quebec     | Ontario TWAEV             |
| glycerol 1-stearate | TWA: 10 mg/m <sup>3</sup>                                  | TWA: 10 mg/m <sup>3</sup> | -          | TWA: 10 mg/m <sup>3</sup> |

**Engineering Measures** Not applicable.

### Personal Protective Equipment

|  |   |
|--|---|
| <b>Eye Protection</b>                  | No special protective equipment required. |
| <b>Hand Protection</b>                 | No special protective equipment required. |
| <b>Skin and body protection</b>        | No special protective equipment required. |
| <b>Respiratory protection</b>          | No special protective equipment required. |
| <b>Thermal hazards</b>                 | Not applicable.                           |
| <b>Hygiene measures</b>                | None under normal use conditions.         |
| <b>Environmental Exposure Controls</b> | See Section 6.                            |



## 11. TOXICOLOGICAL INFORMATION

### Product Information

**Acute Toxicity** Product does not present an acute toxicity hazard based on known or supplied information.

**Principle Routes of Exposure** Skin contact. Eye contact.

**Inhalation** No known effect based on information supplied.

**Skin contact** No known effect based on information supplied.

**Ingestion** No known effect based on information supplied.

**Eye contact** No known effect based on information supplied.

| Chemical Name  | LD50 Oral          | LD50 Dermal        | LC50 Inhalation      |
|--|--------------------|--------------------|----------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 2000 mg/kg ( Rat ) | 2000 mg/kg ( Rat ) | 180 mg/L ( Rat ) 1 h |
| Mentha Arvensis Oil  | 1240 mg/kg ( Rat ) | 5 g/kg ( Rabbit )  | -                    |

### Chronic Toxicity

**Corrosivity** No known effect.

**Sensitization** No known effect.

**Neurological Effects** No known effect.

**Reproductive Toxicity** The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.

**Mutagenic Effects** There are no known mutagenic chemicals in this product.

**Developmental Toxicity** No known effect.

**Teratogenicity** No known effect.

**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Acute Toxicity

| Chemical Name  | Toxicity to algae   | Toxicity to fish                                  | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates                              | Toxicity to other organisms |
|--|---|---|----------------------------|--|-----------------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | EC50 96 h = 0.1 mg/L<br>Desmodesmus subspicatus EC50 72 h = 0.00046 mg/L<br>Pseudokirchneriella subcapitata | LC50 96 h = 1.48 mg/L<br>Brachydanio rerio static | -                          | EC50 48 h = 0.32 mg/L<br>Daphnia magna = 0.1 mg/L<br>EC50 = 0.00046 mg/L<br>EC50 | -                           |

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

| Chemical Name  | Bioconcentration factor (BCF) |
|--|-------------------------------|
| Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides | 13                            |

**Mobility** No information available.

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste from Residues / Unused Products** Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

### TDG

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

### MEX

**UN/ID No** UN3082  
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s.  
**Hazard class** 9  
**Packing Group** III

**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**IATA**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**ERG Code** 9L  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**ICAO**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**IMDG/IMO**

**UN/ID No** UN3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class** 9  
**Packing Group** III  
**EmS No.** F-A, S-F  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s (Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides, Mentha Arvensis Oil), 9, III,

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | no |
| Chronic Health Hazard             | no |
| Fire Hazard                       | no |
| Sudden Release of Pressure Hazard | no |
| Reactive Hazard                   | no |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ                                      |
|---------------|--------------------------|------------------------------------|---|
| Edetic acid   | 5000 lb                  | -                                  | RQ 5000 lb final RQ RQ 2270 kg final RQ |

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.



**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Edetic acid   | 5000 lb                     | -                      | -                         | X                          |

**U.S. State Regulations****California Proposition 65**

This product is not subject to warning labeling under California Proposition 65

**U.S. State Regulations**

| Chemical Name | Pennsylvania |
|---------------|--------------|
| Edetic acid   | X            |

**International Regulations****Canada****WHMIS Hazard Class**

Not subject to WHMIS classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories**

**TSCA** Exempt

**DSL** Exempt

**NDSL** Exempt

**Perfumes contained with the products comply with appropriate IFRA guidance.**

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

|                              |
|------------------------------|
| <b>16. OTHER INFORMATION</b> |
|------------------------------|

**Issuing Date:** 06-Jun-2012

**Revision Date:** 06-Jun-2012

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of MSDS**

# Material Safety Data Sheet



Issuing Date: 27-May-2014

Revision Date: 27-May-2014

Version 1

## 1. PRODUCT AND COMPANY INFORMATION

|                            |  |
|----------------------------|--|
| <b>Product ID:</b>         | 98740661_NA  |
| <b>Product Name</b>        | NIOXIN Scalp Optimizing Cleanser   |
| <b>Product Type</b>        | Finished Product - Consumer (Retail) and Professional Use  |
| <b>Recommended Use</b>     | Personal Beauty Care Product   |
| <b>Synonyms</b>            | No information available   |
| <b>Manufacturer</b>        | The Procter & Gamble Company Sharon Woods Innovation Center 11510 Reed Hartman Highway Cincinnati OH 45241                           |
| <b>E-mail Address</b>      | pgsds.im@pg.com  |
| <b>Emergency Telephone</b> | Transportation (24 HR)<br>CHEMTREC - 1-800-424-9300<br>(U.S./ Canada) or 1-703-527-3887<br>Mexico toll free in country: 800-681-9531 |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Irritating to eyes

|                                     |   |
|-------------------------------------|---|
| <b>OSHA regulatory status</b>       | Consumer Products as defined by the U.S. Consumer Product Safety Act which are used as intended (typical consumer duration and frequency) are exempt from the OSHA Hazard Communication Standard. When used in a professional setting (at a much higher frequency and duration than a typical consumer) this material would be considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| <b>WHMIS</b>                        | Not subject to WHMIS classification.  |
| <b>Principle routes of exposure</b> | Eye contact.  |
| <b>General hazards</b>              | This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use.   |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous ingredients

| Chemical Name   | CAS-No     | Weight % |
|---|------------|----------|
| Poly(oxy-1,2-ethanediyl),<br>alpha-sulfo-omega-(dodecyloxy)-, sodium salt (1:1) | 9004-82-4  | 5 - 10   |
| Sulfuric acid monododecyl ester sodium salt (1:1)                               | 151-21-3   | 3 - 7    |
| Amides, coco, N-hydroxyethyl  | 68140-00-1 | 1 - 5    |
| Zinc,<br>bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)-        | 13463-41-7 | 1 - 5    |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. If symptoms persist, call a physician. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.  |
| <b>Inhalation</b>   | Move to fresh air.   |
| <b>Protection of first-aiders</b>                         | Use personal protective equipment.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to Physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |  |
|---|--|
| <b>Flash point</b>  | Not Applicable   |
| <b>Suitable extinguishing media</b>                                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.   |
| <b>Extinguishing media which shall not be used for safety reasons</b> | No information available.  |
| <b>Special hazard</b>   | None known based on information supplied.  |
| <b>Special protective equipment for fire-fighters</b>                 | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. |

### 6. ACCIDENTAL RELEASE MEASURES

|  |   |
|--|---|
| <b>Personal precautions</b>            | Avoid contact with the skin and the eyes.   |
| <b>Advice for emergency responders</b> | Use personal protective equipment.  |
| <b>Environmental precautions</b>       | <b>Household:</b> Do not discharge product into natural waters without pre-treatment or adequate dilution. <b>Non-household:</b> Should not be released into the environment. |

**Methods for containment** **Non-household:** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods for cleaning up** **Non-household:** Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

## 7. HANDLING AND STORAGE

**Advice on safe handling** Keep out of the reach of children. Observe label precautions.

**Technical measures/Storage conditions** Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name | CAS-No    | ACGIH TLV  | OSHA PEL  | Mexico PEL   |  |
|---------------|-----------|--|---|--|--|
| Zinc oxide    | 1314-13-2 | STEL: 10 mg/m <sup>3</sup> respirable fraction<br>TWA: 2 mg/m <sup>3</sup> respirable fraction | TWA: 5 mg/m <sup>3</sup> fume<br>TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable fraction<br>(vacated) TWA: 5 mg/m <sup>3</sup> fume<br>(vacated) TWA: 10 mg/m <sup>3</sup> total dust<br>(vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction<br>(vacated) STEL: 10 mg/m <sup>3</sup> fume | Mexico: TWA 5 mg/m <sup>3</sup><br>Mexico: TWA 10 mg/m <sup>3</sup><br>Mexico: STEL 10 mg/m <sup>3</sup> |  |
| Chemical Name | CAS-No    | Alberta  | Quebec  | Ontario TWAEV  | British Columbia                                       |
| Zinc oxide    | 1314-13-2 | TWA: 2 mg/m <sup>3</sup><br>STEL: 10 mg/m <sup>3</sup>   | TWA: 10 mg/m <sup>3</sup><br>TWA: 5 mg/m <sup>3</sup><br>STEL: 10 mg/m <sup>3</sup>   | TWA: 2 mg/m <sup>3</sup><br>STEL: 10 mg/m <sup>3</sup>   | TWA: 2 mg/m <sup>3</sup><br>STEL: 10 mg/m <sup>3</sup> |

#### Legend:

TLV - Threshold Limit Value  
 TWAEV - Time Weighted Average Exposure Value  
 ACGIH: (American Conference of Governmental Industrial Hygienists)  
 OSHA: (Occupational Safety & Health Administration)  
 PEL - Permissible Exposure Limit

**Engineering Measures** Not applicable.

#### Personal Protective Equipment

**Eye Protection** If splashes are likely to occur, wear: Safety glasses with side-shields.

**Hand Protection** No special protective equipment required.

**Skin and Body Protection** No special protective equipment required.

**Respiratory Protection** No special protective equipment required.

**Thermal hazards** Not applicable.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

**Environmental exposure controls** See section 6 for more information.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State @20°C** liquid  
**Appearance** white. opaque. viscous liquid.  
**Odor** Mint-like

| <u>Property</u>                        | <u>Values</u>            | <u>Note</u> |
|--|--------------------------|-------------|
| pH value                               | 6.5 - 8.3                |             |
| Melting/freezing point                 | No information available |             |
| Boiling point/boiling range            | No information available |             |
| Flash point                            | Not Applicable           |             |
| Evaporation rate                       | No information available |             |
| flammability (solid, gas)              | No information available |             |
| <b>Flammability Limits in Air</b>      |                          |             |
| Upper flammability limit               | No information available |             |
| Lower Flammability Limit               | No information available |             |
| Vapor pressure                         | No information available |             |
| Vapor density                          | No information available |             |
| Relative density                       | No information available |             |
| Water solubility                       | No information available |             |
| Solubility in other solvents           | No information available |             |
| Partition coefficient: n-octanol/water | No information available |             |
| Autoignition temperature               | No information available | .           |
| Decomposition temperature              | No information available | .           |
| Viscosity of Product                   | No information available |             |
| Bulk Density                           | No information available |             |

| Chemical Name   | Partition Coefficient (n-octanol/water) |
|---|---|
| Sulfuric acid monododecyl ester sodium salt (1:1)                     | < -2.03                                 |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 0.9                                     |

**VOC Content (%)** Products comply with US state and federal regulations for VOC content in consumer products.

**Oxidizing properties** No information available

## 10. STABILITY AND REACTIVITY

**Reactivity** None under normal use conditions.

**Stability** Stable under normal conditions.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

**Conditions to Avoid** None under normal processing.

**Materials to avoid** None in particular.

**Hazardous Decomposition Products** None under normal use.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

**Acute toxicity** Irritating to eyes.

**Principle routes of exposure** Eye contact.

**Inhalation** No known effect based on information supplied.  
**Skin contact** No known effect based on information supplied.  
**Ingestion** No known effect based on information supplied.  
**Eye contact** Irritating to eyes.

| Chemical Name  | CAS-No     | LD50 Oral   | LD50 Dermal  | LC50 Inhalation   |
|--|------------|---|--|---|
| Sulfuric acid monododecyl ester sodium salt (1:1)                      | 151-21-3   | 977 mg/kg bw (OECD 401; rat)                                      | > 500 mg/kg bw (Read across data C10-16ASO <sub>4</sub> , NH <sub>4</sub> ; guideline: Standard Procedure #10; fixed dose procedure; rabbit; based on active ingredient) | -   |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridine thionato-kappaS2]-, (T-4)- | 13463-41-7 | 269 mg/kg bw (OECD 401, rat)                                      | > 2000 mg/kg bw (EPA OPP 81-2, rat)  | 1.03 mg/L air (OECD 403, rat)   |
| Zinc oxide   | 1314-13-2  | > 5000 mg/kg bw (Similar to OECD 401; standard acute method; rat) | > 2000 mg/kg bw (OECD 402; standard acute method; rat)   | > 5.7 mg/L air (Similar to OECD 403; standard acute method; rat; 4 h) |

### Chronic Toxicity

**Corrosivity** No known effect.  
**Sensitization** No known effect.  
**Neurological Effects** No known effect.  
**Reproductive toxicity** The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.  
**Germ cell mutagenicity** There are no known mutagenic chemicals in this product.  
**Developmental toxicity** No known effect.  
**Teratogenicity** No known effect.  
**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

| Chemical Name   | CAS-No     | Toxicity to algae  | Toxicity to fish   | Toxicity to Microorganisms  | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms  |
|---|------------|--|--|---|---|--|
| Sulfuric acid monododecyl ester sodium salt (1:1)                     | 151-21-3   | > 120 mg/L (Guideline: DIN 38412, part 9; Desmodesmus subspicatus; static; freshwater; based on growth rate) | 29 mg/L (Similar to OECD 203; Pimephales promelas; flow-through; freshwater; based on active ingredient) | EC50: 135 mg/L (Guideline not indicated; activated sludge; static; freshwater; respiration rate)  | LC50: 5.55 mg/L (Guideline not indicated; Ceriodaphnia dubia; flow-through; freshwater; based on active ingredient) | -  |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 13463-41-7 | 0.0013 mg/L (Guideline EPA OPP 122-2, static, Skeletonema costatum)  | 0.0026 mg/L (EPA OPP 72-1, flow-through, Pimephales promelas)  | 2.4 mg/L (OECD 209, static, activated sludge)   | 0.0082 mg/L (EPA OPP 72-2, Daphnia magna)   | -  |
| Zinc oxide  | 1314-13-2  | IC50: 0.136 mg/L (OECD 201; Pseudokirchneriella subcapitata; static; freshwater; growth rate)                | 0.112 mg/L (Read across data on Zinc chloride; ASTM, E-729-88; Thymallus arcticus; static; freshwater)   | EC50: > 1000 mg/L (OECD 209; activated sludge of a predominantly domestic sewage; static; freshwater; respiration rate)   | 0.155 mg/L (Read across data on Zinc; US EPA 821-R-02-012; Ceriodaphnia dubia; static; freshwater)                  | EC10: 350 mg/kg soil dw (Read across data on zinc dichloride; ISO 11268-2; Eisenia fetida; annelids; natural soil) |
| Chemical Name   | CAS-No     | Toxicity to algae  | Toxicity to fish   | Toxicity to Microorganisms  | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms  |
| Sulfuric acid monododecyl ester sodium salt (1:1)                     | 151-21-3   | 30 mg/L (Guideline: DIN 38412, part 9; Desmodesmus subspicatus; static; freshwater; based on growth rate)    | > 1.357 mg/L (Guideline not indicated; Pimephales promelas; flow-through; freshwater; 42 d)              |   | 0.88 mg/L (Similar to EPA-600/489/001 and USEPA OPPTS 850.1300; Ceriodaphnia dubia; flow-through; freshwater; 7 d)  |  |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 13463-41-7 | NOEC: 0.46 µg/L (0.00046 mg/L)   | NOEC: 1.22 µg/L (0.00122 mg/L)   | 0.1 mg/L (OECD 209, static, activated sludge)   | NOEC: 2.28 µg/L (0.00228 mg/L)  |  |
| Zinc oxide  | 1314-13-2  | 0.024 mg/L (OECD 201; Pseudokirchneriella subcapitata; static; freshwater; growth rate)                      | 0.039 mg/L (Read across data on Zinc chloride; OECD 215; Oncorhynchus mykiss; flow-through; freshwater)  | NOEC: 0.1 mg/L (Guideline: ISO DIS 9509; activated sludge of a predominantly domestic sewage; static; freshwater; concentration based on element; nitrification rate) | 0.0056 mg/L (Read across data on Zinc sulfate; EPA/600/R-95-136; Holmesimysis costata; semi-static; saltwater)      | 0.0228 mg/L (Read across data on Zinc chloride; microcosm/mesocosm; flow-through; freshwater; 4 wk)                |

### Persistence and degradability

| Chemical Name   | Ready Test Results   | Persistence and degradability   |
|---|--|---|
| Sulfuric acid monododecyl ester sodium salt (1:1)                     | 95 % (OECD 301 B; aerobic; activated sludge, domestic, non-adapted; CO2 evolution; meets 10 d window criteria) | 87.3 % (Similar to OECD 314D; aerobic; natural water / sediment; CO2 evolution; 35 d) |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 39% (OECD 301 B)   | t1/2: 17 hours (River water at ambient temperature)                                   |

### Bioaccumulative potential

| Chemical Name   | Bioconcentration factor (BCF)          |
|---|--|
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 11 (OECD 305 E, Crassostrea virginica) |
| Zinc oxide  | 60960                                  |

**Mobility**

| Chemical Name   | KOC Values  |
|---|---|
| Sulfuric acid monododecyl ester sodium salt (1:1)                     | 446 (Guideline not indicated; HPLC estimation method; adsorption; sediment; at 25 C)  |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | Koc (adsorption): 2347 (Soil #1 sandy loam), 783 (Soil #2 loam), 10632 (Sediment #1 sandy loam) and 3596 (Sediment #2 silt loam); Koc (desorption): 3,293 (Soil #1 sandy loam), 873 (Soil #2 loam), 21814 (Sediment #1 sandy loam) and 6523 (Sediment #2 silt loam) |

**Other adverse effects** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste from Residues / Unused Products** **Household:** Do not discharge product into natural waters without pre-treatment or adequate dilution. **Non-household:** Should not be released into the environment. Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

**California Hazardous Waste Codes (non-household setting)** 331

### 14. TRANSPORT INFORMATION

|             |               |
|-------------|---------------|
| <b>DOT</b>  | Not regulated |
| <b>TDG</b>  | Not regulated |
| <b>MEX</b>  | Not regulated |
| <b>IATA</b> | Not regulated |
| <b>ICAO</b> | Not regulated |
| <b>IMDG</b> | Not regulated |

### 15. REGULATORY INFORMATION

#### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.:

| Chemical Name   | CAS-No     | Weight % | SARA 313 - Threshold Values % |
|---|------------|----------|-------------------------------|
| Carbonic acid, zinc salt (1:1)  | 3486-35-9  | 1.54077  | 1.0                           |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 13463-41-7 | 1        | 1.0                           |

#### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire Hazard                       | No  |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |



**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):.

| Chemical Name                  | CAS-No    | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|--------------------------------|-----------|--------------------------|------------------------------------|
| Carbonic acid, zinc salt (1:1) | 3486-35-9 | 1000 lb                  | -                                  |
| hydrogen chloride              | 7647-01-0 | 5000 lb                  | 5000 lb                            |

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following substance(s) which are either listed as hazardous air pollutants (HAPS) or VOC's per the Clean Air Act:.

| Chemical Name     | CAS-No    | CAA (Clean Air Act) - 1990 Hazardous Air Pollutants |
|-------------------|-----------|---|
| hydrogen chloride | 7647-01-0 | X   |

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):.

| Chemical Name   | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|-----------------------------|------------------------|---------------------------|----------------------------|
| Carbonic acid, zinc salt (1:1)  | 1000 lb                     | X                      | -                         | X                          |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | -                           | X                      | -                         | -                          |
| Zinc oxide  | -                           | X                      | -                         | -                          |
| hydrogen chloride   | 5000 lb                     | -                      | -                         | X                          |

**U.S. State Regulations (RTK)**

| Chemical Name   | New Jersey |
|---|------------|
| Carbonic acid, zinc salt (1:1)  | X          |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | X          |

| Chemical Name                  | Massachusetts |
|--------------------------------|---------------|
| Carbonic acid, zinc salt (1:1) | X             |

| Chemical Name   | Pennsylvania |
|---|--------------|
| Carbonic acid, zinc salt (1:1)  | X            |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | X            |
| Zinc oxide  | X            |
| Sulfuric acid sodium salt (1:2)                                       | X            |
| hydrogen chloride   | X            |
| Glycerin  | X            |
| Propylene glycol  | X            |

| Chemical Name                  | Rhode Island |
|--------------------------------|--------------|
| Carbonic acid, zinc salt (1:1) | X            |

**California Proposition 65**

This product is not subject to warning labeling under California Proposition 65.

**International Regulations****Canada****WHMIS Hazard Class**

Not subject to WHMIS classification.

**WHMIS Statement**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories****TSCA**

Product is a personal care product and regulated under FDA.

**CEPA**

P&G Canadian Regulatory reviewed finished products to ensure CEPA Compliance.

Perfumes contained with the products comply with appropriate IFRA guidance.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**CEPA** - Canadian Environmental Protection Act

**16. OTHER INFORMATION**

**Issuing Date:** 27-May-2014

**Revision Date:** 27-May-2014

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of MSDS**

# Material Safety Data Sheet



Issuing Date: 27-May-2014

Revision Date: 27-May-2014

Version 1

## 1. PRODUCT AND COMPANY INFORMATION

|                            |  |
|----------------------------|--|
| <b>Product ID:</b>         | 92231187_NA  |
| <b>Product Name</b>        | NIOXIN Scalp Optimizing Conditioner  |
| <b>Product Type</b>        | Finished Product - Consumer (Retail) and Professional Use  |
| <b>Recommended Use</b>     | Personal Beauty Care Product   |
| <b>Synonyms</b>            | No information available   |
| <b>Manufacturer</b>        | The Procter & Gamble Company Sharon Woods Innovation Center 11510 Reed Hartman Highway Cincinnati OH 45241                           |
| <b>E-mail Address</b>      | pgsds.im@pg.com  |
| <b>Emergency Telephone</b> | Transportation (24 HR)<br>CHEMTREC - 1-800-424-9300<br>(U.S./ Canada) or 1-703-527-3887<br>Mexico toll free in country: 800-681-9531 |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

|                                     |   |
|-------------------------------------|---|
| <b>OSHA regulatory status</b>       | Consumer Products as defined by the U.S. Consumer Product Safety Act which are used as intended (typical consumer duration and frequency) are exempt from the OSHA Hazard Communication Standard. When used in a professional setting (at a much higher frequency and duration than a typical consumer) this material would NOT be considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| <b>WHMIS</b>                        | Not subject to WHMIS classification.  |
| <b>Principle routes of exposure</b> | None reasonably foreseeable.  |
| <b>General hazards</b>              | This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use.   |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous ingredients

| Chemical Name  | CAS-No     | Weight % |
|--|------------|----------|
| 1-Octadecanol  | 112-92-5   | 1 - 5    |
| Octadecanamide, N-[3-(dimethylamino)propyl]-                             | 7651-02-7  | 1 - 5    |
| Zinc,<br>bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 13463-41-7 | 0.1 - 1  |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. If symptoms persist, call a physician. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.  |
| <b>Inhalation</b>   | Move to fresh air.   |
| <b>Protection of first-aiders</b>                         | Use personal protective equipment.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to Physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |  |
|---|--|
| <b>Flash point</b>  | Not Applicable   |
| <b>Suitable extinguishing media</b>                                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.   |
| <b>Extinguishing media which shall not be used for safety reasons</b> | No information available.  |
| <b>Special hazard</b>   | None known based on information supplied.  |
| <b>Special protective equipment for fire-fighters</b>                 | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. |

### 6. ACCIDENTAL RELEASE MEASURES

|  |   |
|--|---|
| <b>Personal precautions</b>            | None under normal use conditions.   |
| <b>Advice for emergency responders</b> | Use personal protective equipment.  |
| <b>Environmental precautions</b>       | <b>Household:</b> Do not discharge product into natural waters without pre-treatment or adequate dilution. <b>Non-household:</b> Should not be released into the environment. |

---

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | <b>Non-household:</b> Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.   |
| <b>Methods for cleaning up</b> | <b>Non-household:</b> Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

## 7. HANDLING AND STORAGE

|  |   |
|--|---|
| <b>Advice on safe handling</b>               | Keep out of the reach of children. Observe label precautions.   |
| <b>Technical measures/Storage conditions</b> | Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

|   |   |
|---|---|
| <b>Exposure Guidelines</b>                  | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| <b>Engineering Measures</b>                 | Not applicable.   |
| <b><u>Personal Protective Equipment</u></b> |   |
| <b>Eye Protection</b>                       | No special protective equipment required.   |
| <b>Hand Protection</b>                      | No special protective equipment required.   |
| <b>Skin and Body Protection</b>             | No special protective equipment required.   |
| <b>Respiratory Protection</b>               | No special protective equipment required.   |
| <b>Thermal hazards</b>                      | Not applicable.   |
| <b>Hygiene measures</b>                     | None under normal use conditions.   |
| <b>Environmental exposure controls</b>      | See section 6 for more information.   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State @20°C** liquid  
**Appearance** white. Off-white.  
**Odor** Mint-like

| <u>Property</u>                        | <u>Values</u>            | <u>Note</u> |
|--|--------------------------|-------------|
| pH value                               | 4.0 - 5.5                |             |
| Melting/freezing point                 | No information available |             |
| Boiling point/boiling range            | No information available |             |
| Flash point                            | Not Applicable           |             |
| Evaporation rate                       | No information available |             |
| flammability (solid, gas)              | No information available |             |
| <b>Flammability Limits in Air</b>      |                          |             |
| Upper flammability limit               | No information available |             |
| Lower Flammability Limit               | No information available |             |
| Vapor pressure                         | No information available |             |
| Vapor density                          | No information available |             |
| Relative density                       | No information available |             |
| Water solubility                       | No information available |             |
| Solubility in other solvents           | No information available |             |
| Partition coefficient: n-octanol/water | No information available |             |
| Autoignition temperature               | No information available | .           |
| Decomposition temperature              | No information available | .           |
| Viscosity of Product                   | No information available |             |
| Bulk Density                           | No information available |             |

| Chemical Name   | Partition Coefficient (n-octanol/water)   |
|---|---|
| 1-Octadecanol   | 7.4 (Guideline: ASTM E 1147, HPLC method) |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 0.9                                       |

**VOC Content (%)** Products comply with US state and federal regulations for VOC content in consumer products.

**Oxidizing properties** No information available

## 10. STABILITY AND REACTIVITY

**Reactivity** None under normal use conditions.

**Stability** Stable under normal conditions.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

**Conditions to Avoid** None under normal processing.

**Materials to avoid** None in particular.

**Hazardous Decomposition Products** None under normal use.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

**Acute toxicity** Product does not present an acute toxicity hazard based on known or supplied information.

**Inhalation** No known effect based on information supplied.  
**Skin contact** No known effect based on information supplied.  
**Ingestion** No known effect based on information supplied.  
**Eye contact** No known effect based on information supplied.

| Chemical Name  | CAS-No     | LD50 Oral   | LD50 Dermal   | LC50 Inhalation               |
|--|------------|---|---|-------------------------------|
| 1-Octadecanol  | 112-92-5   | > 2000 mg/kg bw (OECD 401, rat)                                       | > 2,000 mg/kg bw (Rabbit)   | -                             |
| Octadecanamide, N-[3-(dimethylamino)propyl]-                           | 7651-02-7  | Low acute toxicity in rats with a LD50 values exceeding 2000 mg/kg bw | Low acute toxicity in rabbits with LD50 values exceeding 2000 mg/kg bw (read-across from related substance) | -                             |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridine thionato-kappaS2]-, (T-4)- | 13463-41-7 | 269 mg/kg bw (OECD 401, rat)  | > 2000 mg/kg bw (EPA OPP 81-2, rat)   | 1.03 mg/L air (OECD 403, rat) |

### Chronic Toxicity

**Corrosivity** No known effect.  
**Sensitization** No known effect.  
**Neurological Effects** No known effect.  
**Reproductive toxicity** The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.  
**Germ cell mutagenicity** There are no known mutagenic chemicals in this product.  
**Developmental toxicity** No known effect.  
**Teratogenicity** No known effect.  
**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

| Chemical Name   | CAS-No     | Toxicity to algae   | Toxicity to fish  | Toxicity to Microorganisms                    | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms |
|---|------------|---|---|---|---|-----------------------------|
| 1-Octadecanol   | 112-92-5   | > 100 mg/L (OECD 201, Scenedesmus subspicatus )                     | > 0.4 mg/L (EU Method C.1, Salmo gairdneri, semi-static)      | EC0: > 10000 mg/L (Pseudomonas putida)        | 1700 mg/L (Guideline: German Industry Standard DIN 38412, Part 11; May 1984, Daphnia magna, static) | -                           |
| Octadecanamide, N-[3-(dimethylamino)propyl]-                          | 7651-02-7  | ErC50 (72h) = 0.14 mg/L<br>ErC10 (72h) = 0.07 mg/L                  | LC50 (96h) = >0.1 <1 mg/L<br>NOEC = 0.1 mg/L                  | NOEC = 100 mg/L                               | EC50 (48h) = 0.38 mg/L<br>NOEC = 0.2 mg/L   | -                           |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 13463-41-7 | 0.0013 mg/L (Guideline EPA OPP 122-2, static, Skeletonema costatum) | 0.0026 mg/L (EPA OPP 72-1, flow-through, Pimephales promelas) | 2.4 mg/L (OECD 209, static, activated sludge) | 0.0082 mg/L (EPA OPP 72-2, flow-through, Daphnia magna)   | -                           |
| Chemical Name   | CAS-No     | Toxicity to algae   | Toxicity to fish  | Toxicity to Microorganisms                    | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 13463-41-7 | NOEC: 0.46 µg/L (0.00046 mg/L)                                      | NOEC: 1.22 µg/L (0.00122 mg/L)                                | 0.1 mg/L (OECD 209, static, activated sludge) | NOEC: 2.28 µg/L (0.00228 mg/L)  |                             |

### Persistence and degradability

| Chemical Name   | Ready Test Results   | Persistence and degradability   |
|---|--|---|
| 1-Octadecanol   | 67% (activated sludge, readily biodegradable, but failing 10-day window) | Half life: 1.1 day (sediment, primary degradation, for readily bioavailable test material), 34.7 day (sediment, primary degradation, less bioavailable test material) |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 39% (OECD 301 B)   | t1/2: 17 hours (River water at ambient temperature)   |

### Bioaccumulative potential

| Chemical Name   | Bioconcentration factor (BCF)          |
|---|--|
| 1-Octadecanol   | 100000 L/kg (Calculated value)         |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | 11 (OECD 305 E, Crassostrea virginica) |

### Mobility

| Chemical Name   | KOC Values  |
|---|---|
| 1-Octadecanol   | 471350 L/Kg (adsorption, batch equilibrium method)  |
| Octadecanamide, N-[3-(dimethylamino)propyl]-                          | Koc = ~1,000-500,000  |
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-, (T-4)- | Koc (adsorption): 2347 (Soil #1 sandy loam), 783 (Soil #2 loam), 10632 (Sediment #1 sandy loam) and 3596 (Sediment #2 silt loam); Koc (desorption): 3,293 (Soil #1 sandy loam), 873 (Soil #2 loam), 21814 (Sediment #1 sandy loam) and 6523 (Sediment #2 silt loam) |

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS



**Waste from Residues / Unused Products** **Household:** Do not discharge product into natural waters without pre-treatment or adequate dilution. **Non-household:** Should not be released into the environment. Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

**California Hazardous Waste Codes (non-household setting)** 561

**14. TRANSPORT INFORMATION**

**DOT** Not regulated  
**TDG** Not regulated  
**MEX** Not regulated  
**IATA** Not regulated  
**ICAO** Not regulated  
**IMDG** Not regulated

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | No |
| Chronic Health Hazard             | No |
| Fire Hazard                       | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard                   | No |

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following substance(s) which are either listed as hazardous air pollutants (HAPS) or VOC's per the Clean Air Act:

| Chemical Name    | CAS-No   | CAA (Clean Air Act) - 1990 Hazardous Air Pollutants |
|------------------|----------|---|
| 2-Phenoxyethanol | 122-99-6 | X   |

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|

|  |   |   |   |   |
|--|---|---|---|---|
| Zinc,<br>bis[1-(hydroxy-kappaO)-2<br>(1H)-pyridinethionato-kap<br>paS2]-, (T-4)- | - | X | - | - |
|--|---|---|---|---|

**U.S. State Regulations (RTK)**

| Chemical Name  | Pennsylvania |
|--|--------------|
| Zinc, bis[1-(hydroxy-kappaO)-2(1H)-pyridinethionato-kappaS2]-,<br>(T-4)- | X            |
| 2-Phenoxyethanol   | X            |
| Benzyl alcohol   | X            |
| Propylene glycol   | X            |

**California Proposition 65**

This product is not subject to warning labeling under California Proposition 65.

**International Regulations****Canada****WHMIS Hazard Class**

Not subject to WHMIS classification.

**WHMIS Statement**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories****TSCA**

Product is a personal care product and regulated under FDA.

**CEPA**

P&G Canadian Regulatory reviewed finished products to ensure CEPA Compliance.

Perfumes contained with the products comply with appropriate IFRA guidance.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**CEPA** - Canadian Environmental Protection Act

|                              |
|------------------------------|
| <b>16. OTHER INFORMATION</b> |
|------------------------------|

**Issuing Date:** 27-May-2014

**Revision Date:** 27-May-2014

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of MSDS**

# Material Safety Data Sheet



Issuing Date: 29-May-2014

Revision Date: 29-May-2014

Version 1

## 1. PRODUCT AND COMPANY INFORMATION

**Product ID:** 96322873\_NA

**Product Name** NIOXIN Minoxidil Topical Solution USP 2% Hair Regrowth Treatment for Women

**Product Type** Finished Product - Consumer (Retail) and Professional Use

**Recommended Use** Personal Beauty Care Product

**Synonyms** No information available

**Manufacturer** The Procter & Gamble Company  
Sharon Woods Innovation Center  
11510 Reed Hartman Highway  
Cincinnati OH 45241

**E-mail Address** pgsds.im@pg.com

**Emergency Telephone** Transportation (24 HR)  
CHEMTREC - 1-800-424-9300  
(U.S./ Canada) or 1-703-527-3887  
Mexico toll free in country: 800-681-9531

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Flammable

**OSHA regulatory status** Consumer Products as defined by the U.S. Consumer Product Safety Act which are used as intended (typical consumer duration and frequency) are exempt from the OSHA Hazard Communication Standard. When used in a professional setting (at a much higher frequency and duration than a typical consumer) this material would be considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**WHMIS** Not subject to WHMIS classification.

**Principle routes of exposure** None reasonably foreseeable.

**General hazards** This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous ingredients

| Chemical Name                                     | CAS-No     | Weight % |
|---|------------|----------|
| Ethanol   | 64-17-5    | 30 - 60  |
| Propylene glycol                                  | 57-55-6    | 10 - 30  |
| 2,4-Pyrimidinediamine, 6-(1-piperidiny)-, 3-oxide | 38304-91-5 | 1 - 5    |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. If symptoms persist, call a physician. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.  |
| <b>Inhalation</b>   | Move to fresh air.   |
| <b>Protection of first-aiders</b>                         | Use personal protective equipment. Remove all sources of ignition.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to Physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Flammable properties</b>   | Flammable liquid.   |
| <b>Flash point</b>  | <= 22 °C / <= 72 °F   |
| <b>Suitable extinguishing media</b>                                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.  |
| <b>Extinguishing media which shall not be used for safety reasons</b> | No information available.   |
| <b>Special hazard</b>   | The release of the following substances is possible in a fire: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Nitrous oxides. May form explosive mixtures with air. |
| <b>Special protective equipment for fire-fighters</b>                 | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.  |

### 6. ACCIDENTAL RELEASE MEASURES

|  |                                    |
|--|------------------------------------|
| <b>Personal precautions</b>            | None under normal use conditions.  |
| <b>Advice for emergency responders</b> | Use personal protective equipment. |

|                                  |  |
|----------------------------------|--|
| <b>Environmental precautions</b> | <b>Household:</b> Do not discharge product into natural waters without pre-treatment or adequate dilution. <b>Non-household:</b> Should not be released into the environment.  |
| <b>Methods for containment</b>   | <b>Non-household:</b> Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.  |
| <b>Methods for cleaning up</b>   | <b>Non-household:</b> ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use non-sparking tools and equipment. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

**7. HANDLING AND STORAGE**

|  |   |
|--|---|
| <b>Advice on safe handling</b>               | Keep out of the reach of children. Observe label precautions. Keep away from open flames, hot surfaces and sources of ignition.   |
| <b>Technical measures/Storage conditions</b> | Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep away from direct sunlight. |

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

| Chemical Name    | CAS-No  | ACGIH TLV                                    | OSHA PEL   | Mexico PEL   |                  |
|------------------|---------|--|--|--|------------------|
| Ethanol          | 64-17-5 | STEL: 1000 ppm                               | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup> | Mexico: TWA 1000 ppm<br>Mexico: TWA 1900 mg/m <sup>3</sup>             |                  |
| Chemical Name    | CAS-No  | Alberta                                      | Quebec   | Ontario TWAEV  | British Columbia |
| Ethanol          | 64-17-5 | TWA: 1000 ppm<br>TWA: 1880 mg/m <sup>3</sup> | TWA: 1000 ppm<br>TWA: 1880 mg/m <sup>3</sup>   | STEL: 1000 ppm   | STEL: 1000 ppm   |
| Propylene glycol | 57-55-6 |  |  | TWA: 10 mg/m <sup>3</sup><br>TWA: 50 ppm<br>TWA: 155 mg/m <sup>3</sup> |                  |

**Legend:**

- TLV - Threshold Limit Value
- TWAEV - Time Weighted Average Exposure Value
- ACGIH: (American Conference of Governmental Industrial Hygienists)
- OSHA: (Occupational Safety & Health Administration)
- PEL - Permissible Exposure Limit

**Engineering Measures** Not applicable.

**Personal Protective Equipment**

- Eye Protection** No special protective equipment required.
- Hand Protection** No special protective equipment required.
- Skin and Body Protection** No special protective equipment required.
- Respiratory Protection** No special protective equipment required.

**Thermal hazards** Not applicable.

**Hygiene measures** None under normal use condntions.

**Environmental exposure controls** See section 6 for more information.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State @20°C liquid  
Appearance clear.  
Odor Alcohol

| <u>Property</u>                        | <u>Values</u>            | <u>Note</u> |
|--|--------------------------|-------------|
| pH value                               | No information available |             |
| Melting/freezing point                 | -114 °C / -173 °F        |             |
| Boiling point/boiling range            | 78 °C / 172 °F           |             |
| Flash point                            | <= 22 °C / <= 72 °F      |             |
| Evaporation rate                       | No information available |             |
| flammability (solid, gas)              | No information available |             |
| Flammability Limits in Air             |                          |             |
| Upper flammability limit               | No information available |             |
| Lower Flammability Limit               | No information available |             |
| Vapor pressure                         | No information available |             |
| Vapor density                          | No information available |             |
| Relative density                       | No information available |             |
| Water solubility                       | No information available |             |
| Solubility in other solvents           | No information available |             |
| Partition coefficient: n-octanol/water | No information available |             |
| Autoignition temperature               | No information available |             |
| Decomposition temperature              | No information available |             |
| Viscosity of Product                   | No information available |             |
| Bulk Density                           | No information available |             |

| Chemical Name    | Partition Coefficient (n-octanol/water) |
|------------------|---|
| Ethanol          | -0.35                                   |
| Propylene glycol | -1.07                                   |

VOC Content (%) Products comply with US state and federal regulations for VOC content in consumer products.  
Oxidizing properties No information available

**10. STABILITY AND REACTIVITY**

Reactivity None under normal use conditions.  
Stability Stable under normal conditions.  
Hazardous polymerization Hazardous polymerization does not occur.  
Hazardous Reactions None under normal processing.  
Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition. Extremes of temperature and direct sunlight.  
Materials to avoid None in particular.  
Hazardous Decomposition Products None under normal use.

**11. TOXICOLOGICAL INFORMATION**

**Product Information**

**Acute toxicity**

**Inhalation** No known effect based on information supplied.  
**Skin contact** No known effect based on information supplied.  
**Ingestion** No known effect based on information supplied.  
**Eye contact** No known effect based on information supplied.

| Chemical Name    | CAS-No  | LD50 Oral   | LD50 Dermal   | LC50 Inhalation   |
|------------------|---------|---|---|---|
| Ethanol          | 64-17-5 | 10470 mg/kg bw (OECD 401; standard acute method; rat) | > 15800 mg/kg bw (Rabbit)   | 116.9 mg/L air (Similar to OECD 403; standard acute method; rat; 4 h) |
| Propylene glycol | 57-55-6 | 22000 mg/kg (rat)                                     | > 2000 mg/kg bw (Guideline not indicated; fixed dose procedure; rabbit) | > 317.042 mg/L (Guideline not indicated; rabbit; 2 h)                 |

**Chronic Toxicity**

**Corrosivity** No known effect.  
**Sensitization** No known effect.  
**Neurological Effects** No known effect.  
**Reproductive toxicity** The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.  
**Germ cell mutagenicity** There are no known mutagenic chemicals in this product.  
**Developmental toxicity** No known effect.  
**Teratogenicity** No known effect.  
**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

| Chemical Name    | CAS-No  | Toxicity to algae   | Toxicity to fish   | Toxicity to Microorganisms  | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms   |
|------------------|---------|---|--|---|---|---|
| Ethanol          | 64-17-5 | 275 mg/L (Similar to OECD 201; <i>Chlorella vulgaris</i> ; static; freshwater; growth rate) | 14200 mg/L (US EPA method E03-05; <i>Pimephales promelas</i> ; flow-through; freshwater)                       | IC50: > 1000 mg/L (OECD 209; activated sludge from domestic and industrial sewage treatment plants; static; freshwater) | 5012 mg/L (Guideline: ASTM E729-80; <i>Ceriodaphnia dubia</i> ; static; freshwater)                                 | > 100 mg/L (Guideline not indicated; <i>Lumbriculus variegatus</i> ; static; freshwater; 96 h)  |
| Propylene glycol | 57-55-6 | 19300 (OECD 201; <i>Skeletonema costatum</i> ; static; saltwater; growth rate)              | 40613 mg/L (Guideline: Environment Canada (1990); <i>Oncorhynchus mykiss</i> ; static; freshwater)             | -   | 18800 mg/L (Guideline: US EPA FIFRA 72-3 (TSCA 797.1950); <i>Americamysis bahia</i> ; static; saltwater; mortality) | 6983 mg/kg sediment dw (Guideline: OSPARCOM guidelines; <i>Corophium volutator</i> ; short-term toxicity; static; saltwater; 10 d)    |
| Chemical Name    | CAS-No  | Toxicity to algae   | Toxicity to fish   | Toxicity to Microorganisms  | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms   |
| Ethanol          | 64-17-5 |   | 7900 mg/L (Read across data on Methanol; guideline not indicated; <i>Oryzias latipes</i> ; static; freshwater) |   | 2 mg/L (Guideline not indicated; <i>Ceriodaphnia dubia</i> ; semi-static; freshwater)                               | > 79 mg/L (Guideline not indicated; <i>Rana temporaria</i> ; static; freshwater; 48 h)  |
| Propylene glycol | 57-55-6 | < 5300 mg/L (OECD 201; <i>Skeletonema costatum</i> ; static; saltwater; growth rate)        |  | NOEC: > 20000 mg/L (Guideline not indicated; <i>Pseudomonas putida</i> ; freshwater; 18 h)                              | 13020 mg/L (EPA 600/4-89/001; <i>Ceriodaphnia sp.</i> ; semi-static; freshwater)                                    | 1368.77 mg/kg sediment dw (Guideline: OSPARCOM guidelines; <i>Corophium volutator</i> ; short-term toxicity; static; saltwater; 10 d) |

**Persistence and degradability**

| Chemical Name    | Ready Test Results  | Persistence and degradability  |
|------------------|---|--|
| Ethanol          | 84 % (Guideline not indicated; aerobic; sewage, domestic, non-adapted; O2 consumption; 20 d; meets 10-d window criterion)       | 83 % (Read across data on Methanol; guideline not indicated; anaerobic; natural water / sediment; 3 d) |
| Propylene glycol | 81.7 % (OECD 301 F; aerobic; activated sludge, domestic (adaptation not specified); CO2 evolution; meets 10-d window criterion) | 95.8 % (OECD 306; aerobic; natural water; DOC removal; 64 d)   |

**Bioaccumulative potential**

| Chemical Name    | Bioconcentration factor (BCF) |
|------------------|-------------------------------|
| Ethanol          | < 10                          |
| Propylene glycol | 0.09 (Calculated value)       |

**Mobility**

| Chemical Name | KOC Values |
|---------------|------------|
|---------------|------------|



|                  |  |
|------------------|--|
| Ethanol          | 1 (Read across data on Methanol; calculated value (PCKOCWIN v1.66 calculation, EPA for EPI suite, 2000); adsorption; soil) |
| Propylene glycol | 2.9 (Calculated value; TGD (non-hydrophobics) method)  |

**Other adverse effects** No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste from Residues / Unused Products** **Household:** Do not discharge product into natural waters without pre-treatment or adequate dilution. **Non-household:** Should not be released into the environment. Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

**California Hazardous Waste Codes (non-household setting)** 331

**Other disposal recommendations** **Non-household:** Products covered by this MSDS, in their original form, when disposed from a commercial facility as waste, are ignitable hazardous waste, D001, according to Federal RCRA regulations(40 CFR 261). Disposal should be in accordance with Local, State and Federal regulations.

**14. TRANSPORT INFORMATION**

**DOT**

UN/ID no UN1170  
 Proper shipping name Ethanol solution  
 Hazard Class 3  
 Packing Group II  
 Description UN1170, Ethanol solution, 3, II, Ltd. Qty.  
 Emergency Response Guide Number 127

**TDG**

UN/ID no UN1170  
 Proper shipping name ETHANOL SOLUTION  
 Hazard Class 3  
 Packing Group II  
 Description UN1170, Ethanol solution, 3, II, Ltd. Qty.

**MEX**

UN/ID no UN1170  
 Proper shipping name Ethanol in solution  
 Hazard Class 3  
 Packing Group II  
 Description UN1170, Ethanol in solution, 3, II, Ltd. Qty.

**IATA**

UN/ID no UN1170  
 Proper shipping name ETHANOL SOLUTION  
 Hazard Class 3  
 Packing Group II  
 ERG Code 3L  
 Description UN1170, Ethanol solution, 3, II, Ltd. Qty.

**IATA comment** Can also be shipped as ID8000 Consumer Commodity

**ICAO**

UN/ID no UN1170  
 Proper shipping name ETHANOL SOLUTION  
 Hazard Class 3

**Packing Group** II  
**Description** UN1170, Ethanol solution, 3, II, Ltd. Qty.  
**ICAO Comment** Can also be shipped as ID8000 Consumer Commodity

**IMDG**

**UN/ID no** UN1170  
**Proper shipping name** ETHANOL SOLUTION  
**Hazard Class** 3  
**Packing Group** II  
**EmS-No** F-E, S-D  
**Description** UN1170, Ethanol solution, 3, II, (22°C c.c.), Ltd. Qty.

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | No  |
| Chronic Health Hazard             | No  |
| Fire Hazard                       | Yes |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**U.S. State Regulations (RTK)**

| Chemical Name    | New Jersey |
|------------------|------------|
| Ethanol          | X          |
| Propylene glycol | X          |

| Chemical Name | Massachusetts |
|---------------|---------------|
| Ethanol       | X             |

| Chemical Name    | Pennsylvania |
|------------------|--------------|
| Ethanol          | X            |
| Propylene glycol | X            |

---

**California Proposition 65**

This product is not subject to warning labeling under California Proposition 65.

**International Regulations**

**Canada**

**WHMIS Hazard Class**

Not subject to WHMIS classification.

**WHMIS Statement**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories**

**TSCA**

Product is a personal care product and regulated under FDA.

**CEPA**

P&G Canadian Regulatory reviewed finished products to ensure CEPA Compliance.

Perfumes contained with the products comply with appropriate IFRA guidance.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**CEPA** - Canadian Environmental Protection Act

**16. OTHER INFORMATION**

**Issuing Date:** 29-May-2014

**Revision Date:** 29-May-2014

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of MSDS**

# Material Safety Data Sheet



Issuing Date: 29-May-2014

Revision Date: 29-May-2014

Version 1

## 1. PRODUCT AND COMPANY INFORMATION

**Product ID:** 96845729\_NA

**Product Name:** NIOXIN Minoxidil Topical Solution USP 5% Hair Regrowth Treatment for Men

**Product Type:** Finished Product - Consumer (Retail) and Professional Use

**Recommended Use:** Personal Beauty Care Product

**Synonyms:** No information available

**Manufacturer:** The Procter & Gamble Company  
Sharon Woods Innovation Center  
11510 Reed Hartman Highway  
Cincinnati OH 45241

**E-mail Address:** pgsds.im@pg.com

**Emergency Telephone:** Transportation (24 HR)  
CHEMTREC - 1-800-424-9300  
(U.S./ Canada) or 1-703-527-3887  
Mexico toll free in country: 800-681-9531

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Flammable

**OSHA regulatory status:** Consumer Products as defined by the U.S. Consumer Product Safety Act which are used as intended (typical consumer duration and frequency) are exempt from the OSHA Hazard Communication Standard. When used in a professional setting (at a much higher frequency and duration than a typical consumer) this material would be considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**WHMIS:** Not subject to WHMIS classification.

**Principle routes of exposure:** None reasonably foreseeable.

**General hazards:** This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous ingredients

| Chemical Name                                      | CAS-No     | Weight % |
|--|------------|----------|
| Ethanol  | 64-17-5    | 30 - 60  |
| Propylene glycol                                   | 57-55-6    | 10 - 30  |
| 2,4-Pyrimidinediamine, 6-(1-piperidinyl)-, 3-oxide | 38304-91-5 | 3 - 7    |

### 4. FIRST AID MEASURES

|   |  |
|---|--|
| <b>General advice</b>                                     | No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. If symptoms persist, call a physician. |
| <b>Skin contact</b>                                       | If skin problems occur, discontinue use. If symptoms persist, call a physician.  |
| <b>Ingestion</b>  | Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.  |
| <b>Inhalation</b>   | Move to fresh air.   |
| <b>Protection of first-aiders</b>                         | Use personal protective equipment. Remove all sources of ignition.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None known.  |
| <b>Notes to Physician</b>                                 | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Flammable properties</b>   | Flammable liquid.   |
| <b>Flash point</b>  | 31 °C / 88 °F   |
| <b>Suitable extinguishing media</b>                                   | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.  |
| <b>Extinguishing media which shall not be used for safety reasons</b> | No information available.   |
| <b>Special hazard</b>   | The release of the following substances is possible in a fire: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Nitrous oxides. May form explosive mixtures with air. |
| <b>Special protective equipment for fire-fighters</b>                 | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.  |

### 6. ACCIDENTAL RELEASE MEASURES

|  |                                    |
|--|------------------------------------|
| <b>Personal precautions</b>            | None under normal use conditions.  |
| <b>Advice for emergency responders</b> | Use personal protective equipment. |

|                                  |  |
|----------------------------------|--|
| <b>Environmental precautions</b> | <b>Household:</b> Do not discharge product into natural waters without pre-treatment or adequate dilution. <b>Non-household:</b> Should not be released into the environment.  |
| <b>Methods for containment</b>   | <b>Non-household:</b> Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.  |
| <b>Methods for cleaning up</b>   | <b>Non-household:</b> ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use non-sparking tools and equipment. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

**7. HANDLING AND STORAGE**

|  |   |
|--|---|
| <b>Advice on safe handling</b>               | Keep out of the reach of children. Observe label precautions. Keep away from open flames, hot surfaces and sources of ignition.   |
| <b>Technical measures/Storage conditions</b> | Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep away from direct sunlight. |

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

| Chemical Name    | CAS-No  | ACGIH TLV                                    | OSHA PEL   | Mexico PEL   |                  |
|------------------|---------|--|--|--|------------------|
| Ethanol          | 64-17-5 | STEL: 1000 ppm                               | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup> | Mexico: TWA 1000 ppm<br>Mexico: TWA 1900 mg/m <sup>3</sup>             |                  |
| Chemical Name    | CAS-No  | Alberta                                      | Quebec   | Ontario TWAEV  | British Columbia |
| Ethanol          | 64-17-5 | TWA: 1000 ppm<br>TWA: 1880 mg/m <sup>3</sup> | TWA: 1000 ppm<br>TWA: 1880 mg/m <sup>3</sup>   | STEL: 1000 ppm   | STEL: 1000 ppm   |
| Propylene glycol | 57-55-6 |  |  | TWA: 10 mg/m <sup>3</sup><br>TWA: 50 ppm<br>TWA: 155 mg/m <sup>3</sup> |                  |

**Legend:**

- TLV - Threshold Limit Value
- TWAEV - Time Weighted Average Exposure Value
- ACGIH: (American Conference of Governmental Industrial Hygienists)
- OSHA: (Occupational Safety & Health Administration)
- PEL - Permissible Exposure Limit

**Engineering Measures** Not applicable.

**Personal Protective Equipment**

- Eye Protection** No special protective equipment required.
- Hand Protection** No special protective equipment required.
- Skin and Body Protection** No special protective equipment required.
- Respiratory Protection** No special protective equipment required.

**Thermal hazards** Not applicable.

**Hygiene measures** None under normal use condntions.

**Environmental exposure controls** See section 6 for more information.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State @20°C liquid  
Appearance clear.  
Odor Alcohol

| <u>Property</u>                        | <u>Values</u>            | <u>Note</u> |
|--|--------------------------|-------------|
| pH value                               | 8.6                      |             |
| Melting/freezing point                 | No information available |             |
| Boiling point/boiling range            | No information available |             |
| Flash point                            | 31 °C / 88 °F            |             |
| Evaporation rate                       | No information available |             |
| flammability (solid, gas)              | No information available |             |
| Flammability Limits in Air             |                          |             |
| Upper flammability limit               | No information available |             |
| Lower Flammability Limit               | No information available |             |
| Vapor pressure                         | No information available |             |
| Vapor density                          | No information available |             |
| Relative density                       | No information available |             |
| Water solubility                       | soluble                  |             |
| Solubility in other solvents           | No information available |             |
| Partition coefficient: n-octanol/water | No information available |             |
| Autoignition temperature               | No information available |             |
| Decomposition temperature              | No information available |             |
| Viscosity of Product                   | No information available |             |
| Bulk Density                           | No information available |             |

| Chemical Name    | Partition Coefficient (n-octanol/water) |
|------------------|---|
| Ethanol          | -0.35                                   |
| Propylene glycol | -1.07                                   |

VOC Content (%) Products comply with US state and federal regulations for VOC content in consumer products.  
Oxidizing properties No information available

**10. STABILITY AND REACTIVITY**

Reactivity None under normal use conditions.  
Stability Stable under normal conditions.  
Hazardous polymerization Hazardous polymerization does not occur.  
Hazardous Reactions None under normal processing.  
Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition. Extremes of temperature and direct sunlight.  
Materials to avoid None in particular.  
Hazardous Decomposition Products None under normal use.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

#### Acute toxicity

**Inhalation** No known effect based on information supplied.  
**Skin contact** No known effect based on information supplied.  
**Ingestion** No known effect based on information supplied.  
**Eye contact** No known effect based on information supplied.

| Chemical Name    | CAS-No  | LD50 Oral   | LD50 Dermal   | LC50 Inhalation   |
|------------------|---------|---|---|---|
| Ethanol          | 64-17-5 | 10470 mg/kg bw (OECD 401; standard acute method; rat) | > 15800 mg/kg bw (Rabbit)   | 116.9 mg/L air (Similar to OECD 403; standard acute method; rat; 4 h) |
| Propylene glycol | 57-55-6 | 22000 mg/kg (rat)                                     | > 2000 mg/kg bw (Guideline not indicated; fixed dose procedure; rabbit) | > 317.042 mg/L (Guideline not indicated; rabbit; 2 h)                 |

#### Chronic Toxicity

**Corrosivity** No known effect.  
**Sensitization** No known effect.  
**Neurological Effects** No known effect.  
**Reproductive toxicity** The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.  
**Germ cell mutagenicity** There are no known mutagenic chemicals in this product.  
**Developmental toxicity** No known effect.  
**Teratogenicity** No known effect.  
**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.



**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

| Chemical Name    | CAS-No  | Toxicity to algae   | Toxicity to fish   | Toxicity to Microorganisms  | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms   |
|------------------|---------|---|--|---|---|---|
| Ethanol          | 64-17-5 | 275 mg/L (Similar to OECD 201; Chlorella vulgaris; static; freshwater; growth rate) | 14200 mg/L (US EPA method E03-05; Pimephales promelas; flow-through; freshwater)                       | IC50: > 1000 mg/L (OECD 209; activated sludge from domestic and industrial sewage treatment plants; static; freshwater) | 5012 mg/L (Guideline: ASTM E729-80; Ceriodaphnia dubia; static; freshwater)                                 | > 100 mg/L (Guideline not indicated; Lumbriculus variegatus; static; freshwater; 96 h)  |
| Propylene glycol | 57-55-6 | 19300 (OECD 201; Skeletonema costatum; static; saltwater; growth rate)              | 40613 mg/L (Guideline: Environment Canada (1990); Oncorhynchus mykiss; static; freshwater)             | -   | 18800 mg/L (Guideline: US EPA FIFRA 72-3 (TSCA 797.1950); Americamysis bahia; static; saltwater; mortality) | 6983 mg/kg sediment dw (Guideline: OSPARCOM guidelines; Corophium volutator; short-term toxicity; static; saltwater; 10 d)    |
| Chemical Name    | CAS-No  | Toxicity to algae   | Toxicity to fish   | Toxicity to Microorganisms  | Toxicity to daphnia and other aquatic invertebrates   | Toxicity to other organisms   |
| Ethanol          | 64-17-5 |   | 7900 mg/L (Read across data on Methanol; guideline not indicated; Oryzias latipes; static; freshwater) |   | 2 mg/L (Guideline not indicated; Ceriodaphnia dubia; semi-static; freshwater)                               | > 79 mg/L (Guideline not indicated; Rana temporaria; static; freshwater; 48 h)  |
| Propylene glycol | 57-55-6 | < 5300 mg/L (OECD 201; Skeletonema costatum; static; saltwater; growth rate)        |  | NOEC: > 20000 mg/L (Guideline not indicated; Pseudomonas putida; freshwater; 18 h)                                      | 13020 mg/L (EPA 600/4-89/001; Ceriodaphnia sp.; semi-static; freshwater)                                    | 1368.77 mg/kg sediment dw (Guideline: OSPARCOM guidelines; Corophium volutator; short-term toxicity; static; saltwater; 10 d) |

**Persistence and degradability**

| Chemical Name    | Ready Test Results  | Persistence and degradability  |
|------------------|---|--|
| Ethanol          | 84 % (Guideline not indicated; aerobic; sewage, domestic, non-adapted; O2 consumption; 20 d; meets 10-d window criterion)       | 83 % (Read across data on Methanol; guideline not indicated; anaerobic; natural water / sediment; 3 d) |
| Propylene glycol | 81.7 % (OECD 301 F; aerobic; activated sludge, domestic (adaptation not specified); CO2 evolution; meets 10-d window criterion) | 95.8 % (OECD 306; aerobic; natural water; DOC removal; 64 d)   |

**Bioaccumulative potential**

| Chemical Name    | Bioconcentration factor (BCF) |
|------------------|-------------------------------|
| Ethanol          | < 10                          |
| Propylene glycol | 0.09 (Calculated value)       |

**Mobility**

| Chemical Name | KOC Values |
|---------------|------------|
|---------------|------------|

|                  |  |
|------------------|--|
| Ethanol          | 1 (Read across data on Methanol; calculated value (PCKOCWIN v1.66 calculation, EPA for EPI suite, 2000); adsorption; soil) |
| Propylene glycol | 2.9 (Calculated value; TGD (non-hydrophobics) method)  |

Other adverse effects No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste from Residues / Unused Products** **Household:** Do not discharge product into natural waters without pre-treatment or adequate dilution. **Non-household:** Should not be released into the environment. Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

**California Hazardous Waste Codes (non-household setting)** 331

**Other disposal recommendations** **Non-household:** Products covered by this MSDS, in their original form, when disposed from a commercial facility as waste, are ignitable hazardous waste, D001, according to Federal RCRA regulations(40 CFR 261). Disposal should be in accordance with Local, State and Federal regulations.

**14. TRANSPORT INFORMATION**

**DOT**

UN/ID no UN1170  
 Proper shipping name Ethanol solutions  
 Hazard Class 3  
 Packing Group III  
 Description UN1170, Ethanol solutions, 3, III, Ltd. Qty.  
 Emergency Response Guide Number 127

**TDG**

UN/ID no UN1170  
 Proper shipping name Ethanol solutions  
 Hazard Class 3  
 Packing Group III  
 Description UN1170, Ethanol solution, 3, III, Ltd. Qty.

**MEX**

UN/ID no UN1170  
 Proper shipping name Ethanol solutions  
 Hazard Class 3  
 Packing Group III  
 Description UN1170, Ethanol solutions, 3, III, Ltd. Qty.

**IATA**

UN/ID no UN1170  
 Proper shipping name Ethanol solutions  
 Hazard Class 3  
 Packing Group III  
 ERG Code 3L  
 Description UN1170, Ethanol solution, 3, III, Ltd. Qty.

**IATA comment** Can also be shipped as ID8000 Consumer Commodity

**ICAO**

UN/ID no UN1170  
 Proper shipping name Ethanol solutions  
 Hazard Class 3

**Packing Group** III  
**Description** UN1170, Ethanol solution, 3, III, Ltd. Qty.  
**ICAO Comment** Can also be shipped as ID8000 Consumer Commodity

**IMDG**

**UN/ID no** UN1170  
**Proper shipping name** Ethanol solutions  
**Hazard Class** 3  
**Packing Group** III  
**EmS-No** F-E, S-D  
**Description** UN1170, Ethanol solution, 3, III, Ltd. Qty.

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Acute Health Hazard No  
 Chronic Health Hazard No  
 Fire Hazard Yes  
 Sudden release of pressure hazard No  
 Reactive Hazard No

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**Food and Drug Administration (FDA)**

The product described in this Material Safety Data Sheet is regulated under the Federal Food, Drug, and Cosmetics Act and is safe to use as per directions on container, box or accompanying literature (where applicable).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**U.S. State Regulations (RTK)**

| Chemical Name    | New Jersey |
|------------------|------------|
| Ethanol          | X          |
| Propylene glycol | X          |

| Chemical Name | Massachusetts |
|---------------|---------------|
| Ethanol       | X             |

| Chemical Name    | Pennsylvania |
|------------------|--------------|
| Ethanol          | X            |
| Propylene glycol | X            |

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**California Proposition 65**

This product is not subject to warning labeling under California Proposition 65.

**International Regulations**

**Canada**

**WHMIS Hazard Class**

Not subject to WHMIS classification.

**WHMIS Statement**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. This product is regulated by the Food and Drug Administration of Health Canada and is therefore exempt from the requirements of CEPA.

**International Inventories**

**TSCA**

Product is a personal care product and regulated under FDA.

Perfumes contained with the products comply with appropriate IFRA guidance.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**CEPA** - Canadian Environmental Protection Act

**16. OTHER INFORMATION**

**Issuing Date:** 29-May-2014

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**End of MSDS**