1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name LumiBrite 22%

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Vital teeth bleaching

Uses advised against No information available

Supplier's details

Supplier Address DenMat
1017 W. Central Ave.
Lompoc, CA 93436
TEL: 805-346-3700

Manufacturer Address DenMat
1017 W. Central Ave.
Lompoc, CA 93436
TEL: 805-346-3700

Emergency telephone number

Emergency Telephone Number 805-346-3700

2. HAZARDS IDENTIFICATION

Classification

Serious Eye Damage/Eye Irritation Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Danger

Hazard Statements
• Causes serious eye damage
Appearance  Colorless  Physical State  Liquid  Odor  Mint

Precautionary Statements
Prevention
• Wear eye/face protection.

General Advice
• None

Eyes
• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
  • Immediately call a POISON CENTER or doctor/physician.

Storage
• None

Disposal
• None

Hazard Not Otherwise Classified (HNOC)
Not applicable

Other information
Prolonged or repeated skin contact may cause severe irritation.
17.2% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>56-81-5</td>
<td>55-75</td>
<td>*</td>
</tr>
<tr>
<td>Urea hydrogen peroxide</td>
<td>124-43-6</td>
<td>20-25</td>
<td>*</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>1310-58-3</td>
<td>0.1 - 1</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice
If symptoms persist, call a physician.

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention immediately if irritation persists.

Skin Contact
Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.

Inhalation
Not an expected route of exposure. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician or Poison Control Center immediately.
Ingestion
Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Protection of First-aiders
Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects
Serious eye irritation or damage.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical
Thermal decomposition can lead to release of irritating gases and vapors.

Explosion Data
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

Protective Equipment and Precautions for Firefighters
Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Avoid contact with the skin and the eyes. Wash thoroughly after handling. Refer to Section 8 for personal protective equipment.

Environmental Precautions

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment
Contain and collect spillage 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).

Methods for Cleaning Up
Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities
**Storage**
Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children.

**Incompatible Products**
Strong reducing agents. Metals.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Control parameters

#### Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin 56-81-5</td>
<td>TWA: 10 mg/m³ mist</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Potassium hydroxide 1310-58-3</td>
<td>Ceiling: 2 mg/m³</td>
<td>(vacated) Ceiling: 2 mg/m³</td>
<td>Ceiling: 2 mg/m³</td>
</tr>
</tbody>
</table>

*Immediately Dangerous to Life or Health. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH:*

**Other Exposure Guidelines**
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Measures**
Showers
Eyewash stations
Ventilation systems

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

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

**Skin and Body Protection**
Protective gloves.

**Respiratory Protection**
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures**
When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/ - Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.1 - 7.1</td>
<td>None known</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>-5 °C</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>&gt; 100 °C</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable.</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>upper flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>lower flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.05-1.15 @ 25°C</td>
<td>None known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Miscible with water</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Insoluble</td>
<td>Insoluble. None known</td>
</tr>
</tbody>
</table>
Partition coefficient: n-octanol/water | No data available | None known
Autoignition Temperature | No data available | None known
Decomposition Temperature | No data available | None known
Viscosity | 250k - 1MM cPs | None known

Flammable Properties | Not flammable
Explosive Properties | No data available
Oxidizing Properties | No data available

Other information
VOC Content (%) | Not applicable.

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
Strong reducing agents. Metals.

Hazardous decomposition products
Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Product is safe for its intended use based on the formulation, testing results, and the long history of safe consumer use.

Inhalation
Not an expected route of exposure. Inhalation of mist may cause irritation to the respiratory system.

Eye Contact
Not an expected route of exposure. Expected to be severely irritating or corrosive to eyes based on components present in formulation.

Skin Contact
Based on the ingredients present in the formulation, prolonged or repeated skin contact may be irritation, or severely irritating, to the skin. However, testing of tooth whiteners containing 10-22% urea hydrogen peroxide has shown to not cause primary skin irritation to the skin of animals. Irritation may occur to mucous membranes due to the oxidative nature of the hydrogen peroxide present, especially after prolonged or repeated contact.
**Ingestion**

Not expected to be toxic following ingestion. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>= 12600 mg/kg (Rat)</td>
<td>= 21900 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>= 214 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms**

Eye contact with liquid may cause irritation including stinging, burning, tearing, or reddening of the eyes.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Corrosivity**

Causes serious eye irritation. Risk of serious damage to eyes.

**Sensitization**

No information available.

**Mutagenic Effects**

Multiple mutagenicity studies of tooth whiteners containing hydrogen peroxide or urea hydrogen peroxide did not show mutagenic effects.

**Carcinogenicity**

Contains no ingredients above reportable quantities listed as a carcinogen.

**Reproductive Toxicity**

Not classified due to lack of data.

**Developmental Toxicity**

Not classified due to lack of data.

**STOT - single exposure**

None under normal use conditions.

**STOT - repeated exposure**

None under normal use conditions.

**Chronic Toxicity**

Avoid repeated exposure. Prolonged exposure may cause chronic effects.

**Target Organ Effects**


**Aspiration Hazard**

No information available.

**Numerical measures of toxicity - Product**

Acute Toxicity

17.2% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

<table>
<thead>
<tr>
<th>LD50 Oral</th>
<th>&gt;5000 mg/kg; Acute toxicity estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Dermal</td>
<td>&gt;5000 mg/kg; Acute toxicity estimate</td>
</tr>
</tbody>
</table>

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>-</td>
<td>LC50 96 h: 51 - 57 mL/L static (Oncorhynchus mykiss)</td>
<td>-</td>
<td>EC50 24 h: &gt; 500 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td></td>
<td>LC50 96 h: = 80 mg/L static (Gambusia affinis)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>-1.76</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>0.83</td>
</tr>
</tbody>
</table>

**Other Adverse Effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**
Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOT

Not regulated

IATA

Not regulated

IMDG/IMO

Not regulated.

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL</td>
<td>Substances comply or are exempt</td>
</tr>
<tr>
<td>ENCS</td>
<td>Substances comply or are exempt</td>
</tr>
<tr>
<td>IECSC</td>
<td>Substances comply or are exempt</td>
</tr>
<tr>
<td>KECL</td>
<td>Substances comply or are exempt</td>
</tr>
<tr>
<td>PICCS</td>
<td>Substances comply or are exempt</td>
</tr>
<tr>
<td>AICS</td>
<td>Substances comply or are exempt</td>
</tr>
</tbody>
</table>

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

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

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

Clean Water Act

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
</table>
LumiBrite 22%  
Revision Date  15-Apr-2015

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

**CERCLA**

**U.S. State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Urea peroxide</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**U.S. EPA Label Information**

**EPA Pesticide Registration Number**  Not applicable

**16. OTHER INFORMATION**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>Physical and Chemical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard 2</td>
<td>Health Hazard 2</td>
<td>Flammability 0 Instability 0</td>
</tr>
<tr>
<td>Flammability 0</td>
<td>Physical Hazard 0</td>
<td>Personal Protection X</td>
</tr>
</tbody>
</table>

**Issuing Date**  15-Apr-2015
**Revision Date**  15-Apr-2015

**General Disclaimer**
The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet