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

GHS product identifier

Product Name TBlue ® Dye Rinse Swab

Other means of identification

Synonyms TBlue ® solution

Recommended use of the chemical and restrictions on use

Recommended Use Professional dental

Uses advised against No information available

Supplier's details

Supplier 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

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Skin Corrosion/Irritation Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Warning

Hazard Statements
• Causes skin irritation
Appearance: Colorless.  
Physical State: Liquid.  
Odor: Acetic acid/fruit.

Precautionary Statements
Prevention
• Wash face, hands and any exposed skin thoroughly after handling.  
• Wear protective gloves.

General Advice
• Specific treatment (see supplemental instructions on the administration of antidotes on this label)

Skin
• IF ON SKIN: Wash with plenty of soap and water.  
• If skin irritation occurs: Get medical advice/attention.  
• Take off contaminated clothing and wash before reuse.

Storage
• None

Disposal
• None

Hazard Not Otherwise Classified (HNOC)
Not applicable.

Other information
Harmful to aquatic life.
0.7% 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>Ethanol</td>
<td>64-17-5</td>
<td>5-10</td>
<td>*</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>64-19-7</td>
<td>1-5</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
Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists, call a physician.

Skin Contact
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation
Move to fresh air. If symptoms persist, obtain medical attention.
Ingestion
Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Irritation. Burning.

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 No information available.

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
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with the skin and the eyes. Avoid breathing vapors or mists.

Environmental Precautions

Environmental Precautions Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products None known based on information supplied.
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>Ethanol 64-17-5</td>
<td>STEL: 1000 ppm</td>
<td>TWA: 1000 ppm; TWA: 1900 mg/m³ (vacated) TWA: 1000 ppm</td>
<td>IDLH: 3300 ppm 10% LEL; TWA: 1000 ppm; TWA: 1900 mg/m³</td>
</tr>
<tr>
<td>Acetic acid 64-19-7</td>
<td>STEL = 15 ppm; TWA: 10 ppm</td>
<td>TWA: 10 ppm; TWA: 25 mg/m³ (vacated) TWA: 10 ppm; (vacated) TWA: 25 mg/m³</td>
<td>IDLH: 50 ppm; TWA: 10 ppm; TWA: 25 mg/m³; STEL: 15 ppm; STEL: 37 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Measures
- Showers
- Eyewash stations
- Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
- Safety glasses with side-shields.

Skin and Body Protection
- Protective gloves. Long sleeved clothing.

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
- Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. 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>3 - 4.5</td>
<td>None known</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>16.5 °C</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>118 °C</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</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></td>
<td></td>
</tr>
<tr>
<td>lower flammability limit</td>
<td></td>
<td></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>1.053 @ 25°C; No units, but stated at a given temperature</td>
<td>None known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Miscible</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Partial.</td>
<td>None known</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
</tbody>
</table>
Viscosity  
Similar to water  
None known

Flammable Properties  
Not flammable

Explosive Properties  
No data available

Oxidizing Properties  
No data available

Other information  
VOC Content (%)  
7.48

10. STABILITY AND REACTIVITY

Reactivity
No data available.

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
None known based on information supplied.

Incompatible materials
None known based on information supplied.

Hazardous decomposition products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation  
There is no data available for this product.

Eye Contact  
There is no data available for this product. Based on components: Contact with eyes may cause irritation.

Skin Contact  
There is no data available for this product. Based on components: May cause irritation.

Ingestion  
There is no data available for this product. Based on components: Ingestion may cause irritation to mucous membranes.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms  
Skin reactions or irritation. Redness.
Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization
No information available.

Mutagenic Effects
No information available.

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed and abused as an alcoholic beverage.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>A3</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
</tr>
</tbody>
</table>

**ACGIH:** (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen

**IARC:** (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans

**NTP:** (National Toxicity Program)
Known - Known Carcinogen

**OSHA:** (Occupational Safety & Health Administration)
X - Present

Reproductive Toxicity
No information available.

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Aspiration Hazard
No information available.

**Numerical measures of toxicity - Product**

**Acute Toxicity**
0.7% of the mixture consists of ingredient(s) of unknown toxicity.

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

**LD50 Oral**
29135 mg/kg; Acute toxicity estimate

**LD50 Dermal**
22993 mg/kg; Acute toxicity estimate

**Inhalation dust/mist**
215.3 mg/L; Acute toxicity estimate

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**
The environmental impact of this product has not been fully investigated.

<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>Ethanol 64-17-5</td>
<td>LC50 96 h: 12.0 - 16.0 mL/L static (Oncorhynchus mykiss)</td>
<td>EC50 = 34634 mg/L 30 min</td>
<td>LC50 48 h: 9268 - 14221 mg/L (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC50 96 h: &gt; 100 mg/L static (Pimephales promelas)</td>
<td>EC50 = 35470 mg/L 5 min</td>
<td>EC50 24 h: = 10800 mg/L (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC50 96 h: 13400 - 15100 mg/L flow-through (Pimephales promelas)</td>
<td>LC50 48 h: = 9268 - 14221 mg/L (Daphnia magna)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetic acid 64-19-7</td>
<td>LC50 96 h: = 75 mg/L static (Lepomis macrochirus)</td>
<td>EC50 = 8.8 mg/L 15 min</td>
<td>EC50 48 h: = 65 mg/L Static (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC50 96 h: = 79 mg/L static (Pimephales promelas)</td>
<td>EC50 = 8.8 mg/L 25 min</td>
<td>EC50 48 h: = 47 mg/L (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC50 = 8.8 mg/L 5 min</td>
<td></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>Ethanol</td>
<td>-0.32</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>-0.31</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.

14. TRANSPORT INFORMATION

DOT
Not regulated

TDG
Not regulated

MEX
Not regulated

ICAO
Not regulated

IATA
Not regulated

IMDG/IMO
Not regulated

RID
Not regulated

ADR
Not regulated

ADN
Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA
Exempt

DSL
Exempt

NDSSL
Exempt

EINECS
Exempt

ENCS
Exempt

IECSC
Exempt

KECL
Exempt

PICCS
Exempt

AICS
Exempt

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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>Code</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>
</tbody>
</table>
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):

<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>
<tbody>
<tr>
<td>Acetic acid</td>
<td>5000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

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):

<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>Acetic acid</td>
<td>5000 lb</td>
<td></td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

U.S. State Regulations

California Proposition 65
The listed substance(s) is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>California Prop. 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>Developmental</td>
</tr>
<tr>
<td>Acetic acid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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>Ethanol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetic acid</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

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

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date
6 May-2016

Revision Date
6 May-2016

Revision Note
N/A

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