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

Product identifier

Product Name "Sparkle" Optical Lens Cleaner

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lens/Glass cleaner
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address
A.J. Funk and Co
1471 Timber Drive, Elgin, Illinois, 60123
US
Phone: 8477416760
Fax: 8477416767
Contact:
Contact Phone: 8477416760
Emergency Phone: 8772253865

Emergency telephone number

Company Emergency Phone Number 8772253865

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

GHS Label elements, including precautionary statements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Clear  Physical State Liquid  Odor Pleasant
Precautionary Statements - Prevention  
Obtain special instructions before use

Precautionary Statements - Response  
None

Precautionary Statements - Storage  
None

Precautionary Statements - Disposal  
None

Hazards not otherwise classified (HNOC)  
• Not Applicable

Unknown Toxicity  
0% of the mixture consists of ingredient(s) of unknown toxicity

Other information  
May cause slight eye irritation  
Prolonged or repeated contact may dry skin and cause irritation.

Interactions with Other Chemicals  
No information available.

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>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>5 - 10</td>
<td>*</td>
</tr>
</tbody>
</table>

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

4. FIRST AID MEASURES

First aid measures

Eye Contact  
Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

Skin Contact  
Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

Inhalation  
Move to fresh air. If symptoms persist, call a physician.

Ingestion  
Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Protection of First-aiders  
Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination

Most important symptoms and effects, both acute and delayed
Most Important Symptoms/Effects  No information available.

Indication of any immediate medical attention and special treatment needed

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
No information available

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact  No

Sensitivity to Static Discharge  No

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  Avoid contact with eyes.

Environmental precautions

Environmental Precautions  Refer to protective measures listed in Sections 7 and 8.

Methods and material 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.
7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes.

Conditions for safe storage, including any incompatibilities

Storage
Keep container tightly closed.

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>2-Butoxyethanol</td>
<td>TWA: 20 ppm</td>
<td>TWA: 50 ppm TWA: 240 mg/m$^3$ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m$^3$ (vacated) S*</td>
<td>IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m$^3$</td>
</tr>
</tbody>
</table>

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

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.

Appropriate engineering controls

Engineering Measures
- Showers
- Eyewash stations
- Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/ Face Protection
No special protective equipment required.

Skin and Body Protection
No special protective equipment required.

Respiratory Protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Appearance</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td>Odor</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td>Pleasant</td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks/ Method</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>171 °C / 340 °F</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></td>
<td></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>pH</td>
<td>7</td>
<td>None known</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>171 °C / 340 °F</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>None known</td>
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<td>None known</td>
</tr>
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<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></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>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely soluble</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</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>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Other Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening Point</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Particle Size</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Particle Size Distribution</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

### 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**

Carbon oxides.

### 11. TOXICOLOGICAL INFORMATION
Information on likely routes of exposure

Product Information

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

Inhalation

Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eye Contact

May cause irritation.

Skin Contact

Prolonged or repeated contact may dry skin and cause irritation.

Ingestion

Not an expected route of exposure. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>= 470 mg/kg (Rat)</td>
<td>= 220 mg/kg (Rabbit)</td>
<td>= 450 ppm (Rat) 4 h</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as 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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>A3</td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive Toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Chronic Toxicity

No known effect based on information supplied.

Target Organ Effects

Eyes. Respiratory system. Skin.

Aspiration Hazard

No information available.

Numerical measures of toxicity - Product Information

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

ATEmix (oral)

5,222.00 mg/kg
ATEmix (dermal)  
12,222.00 mg/kg (ATE)

ATEmix (inhalation-dust/mist)  
16.70 mg/L

ATEmix (inhalation-vapor)  
122.00 ATEmix

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>0.81</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

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

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>2-Butoxyethanol</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Other adverse effects  
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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  
Dispose of in accordance with local regulations.

California Hazardous Waste Codes  
561

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>DOT</th>
<th>TDG</th>
<th>MEX</th>
<th>ICAO</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT REGULATED</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>
15. REGULATORY INFORMATION

International Inventories

TSCA  Complies
DSL  All components are listed either on the DSL or NDSL.

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

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol - 111-76-2</td>
<td>111-76-2</td>
<td>5 - 10</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>No</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>

CWA (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).

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.

US 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>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol 111-76-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

International Regulations

Mexico
National occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td></td>
<td>Mexico: TWA 26 ppm</td>
</tr>
<tr>
<td>111-76-2 (5 - 10)</td>
<td></td>
<td>Mexico: TWA 120 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL 75 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL 360 mg/m³</td>
</tr>
</tbody>
</table>

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class
Non-controlled

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</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

Revision Date
25-Apr-2014

Revision Note
No information available

General 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 Safety Data Sheet