1. Product and Company Identification

Material name: TECH SPEC LENS CLEANER  
Product number: 850771  
Company information: Brulin & Company, Inc.  
P.O. Box 270  
Indianapolis, IN 46206 US  
www.Brulin.com

Emergency: CHEMTREC 1-800-424-9300  
General information: Phone: 317-923-3211  
Fax: 317-925-4596

2. Hazards Identification

Emergency overview: Vapors may cause drowsiness and dizziness.

Potential health effects:
- Eyes: Can cause severe eye irritation.
- Skin: Prolonged and/or repeated skin contact may result in mild irritation or redness. Components of the product may be absorbed into the body through the skin.
- Inhalation: Health injuries are not known or expected under normal use. Prolonged or excessive inhalation may cause respiratory tract irritation.
- Ingestion: Health injuries are not known or expected under normal use. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>&lt; 2.5</td>
</tr>
</tbody>
</table>

Non-hazardous and other components below reportable levels: > 80

4. First Aid Measures

First aid procedures:
- Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops or persists.
- Skin contact: Wash with soap and water. Launder contaminated clothing before reuse. Get medical attention if irritation develops or persists.
- Inhalation: Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.
- Ingestion: Do not induce vomiting without medical advice. If conscious, drink plenty of water. If ingestion of a large amount does occur, seek medical attention.

General advice: If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties: Flammable Liquid.

Extinguishing media:
- Suitable extinguishing media: Small Fires: Dry chemical, CO2, water spray or regular foam.
- Large Fires: Water spray, fog or regular foam.
6. Accidental Release Measures

Personal precautions
Ensure adequate ventilation. Remove all sources of ignition.

Methods for containment
Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up
Never return spills in original containers for re-use.

Large Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling
Do not breathe gas/fumes/vapor/spray. Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges.

Storage
Keep at temperatures between 4 and 50°C. Keep in a well-ventilated place. Keep out of the reach of children. Keep container tightly closed.

8. Exposure Controls / Personal Protection

Engineering controls
Use general ventilation.

Personal protective equipment

Eye / face protection
Safety glasses. or Goggles.

Skin protection
Impervious butyl rubber gloves.

Respiratory protection
No personal respiratory protective equipment normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations
When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance
Liquid.

Color
blue

Odor
alcohol

Odor threshold
Not available.

Form
Liquid.

pH
7 - 8

Freezing point
< 30 °F (< -1.1 °C)

Boiling point
192 °F (88.9 °C)

Flash point
98 °F (36.7 °C) Tag Closed Cup

Evaporation rate
Not available.

Flammability limits in air, upper, % by volume
Not available.

Flammability limits in air, lower, % by volume
Not available.

Vapor density
Not available.

Specific gravity
0.982

Solubility (water)
100 %

VOC
11.15 % w/w

10. Chemical Stability & Reactivity Information

Chemical stability
Stable.
Conditions to avoid
Heat, flames and sparks.
Incompatible materials
Strong oxidizing agents.
Hazardous decomposition products
Carbon monoxide and carbon dioxide.
Possibility of hazardous reactions
Will not occur.

11. Toxicological Information

Acute effects
Acute LD50: 18661 mg/kg, Rat, Oral
Acute LD50: 13321 mg/kg, Rat, Dermal
Acute LC50: 124 mg/l/4h, Rat, Inhalation

Carcinogenicity
IARC Monographs on Occupational Exposures to Chemical Agents: Overall evaluation
2-Butoxyethanol (111-76-2) 3 Classification not possible from current data.
US ACGIH Threshold Limit Values: A3 carcinogen
2-Butoxyethanol (111-76-2) Group A3 Confirmed animal carcinogen with unknown relevance to humans.
US ACGIH Threshold Limit Values: A4 carcinogen
Isopropyl alcohol (67-63-0) Group A4 Not classifiable as a human carcinogen.

Further information
Symptoms may be delayed.

12. Ecological Information

Ecotoxicity
Components of this product have been identified as having potential environmental concerns. This material is not expected to be harmful to aquatic life.

13. Disposal Considerations

Waste codes
D001: Waste Flammable material with a flash point <140 F

Disposal instructions
Consult authorities before disposal. Dispose in accordance with all applicable regulations. If discarded, this product is considered a RCRA ignitable waste, D001. Incinerate the material under controlled conditions in an approved incinerator. Dispose of this material and its container at hazardous or special waste collection point.

14. Transport Information

DOT
Basic shipping requirements:
Proper shipping name Flammable Liquid, NOS (Isopropyl alcohol)
Hazard class 3
UN number UN1993
Packing group III
Additional information:
Special provisions B1, B52, IB3, T4, TP1, TP29
Packaging exceptions 150
Packaging non bulk 203
Packaging bulk 242
ERG number 128

DOT Requirements NON-BULK
Basic shipping requirements:
Proper shipping name Consumer Commodity, ORM-D (Isopropyl alcohol)

IATA
Basic shipping requirements:
Proper shipping name Flammable Liquid, NOS (Isopropyl alcohol)
Hazard class 3
UN number 1993
Packing group III
TECH SPEC LENS CLEANER
Product number: 850771

Additional information:
- Packaging instructions: 310
- cargo only
- Maximum net quantity: 60 L
- packaging
- Maximum net quantity: 220 L
- packaging cargo only
- ERG code: 3L

IMDG

Basic shipping requirements:
- Proper shipping name: Flammable Liquid, NOS (Isopropyl alcohol)
- Hazard class: 3
- UN number: UN1993
- Packing group: III

Additional information:
- Packaging exceptions: 150
- Labels required: 3

15. Regulatory Information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA (Superfund) reportable quantity
2-Butoxyethanol: 1.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazard categories:
  - Immediate Hazard - Yes
  - Delayed Hazard - Yes
  - Fire Hazard - Yes
  - Pressure Hazard - No
  - Reactivity Hazard - No

- Section 302 extremely hazardous substance: No
- Section 311 hazardous chemical: Yes

State regulations
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - Pennsylvania RTK - Hazardous Substances: Listed substance
2-Butoxyethanol (111-76-2) Listed.
Isopropyl alcohol (67-63-0) Listed.
16. Other Information

HMIS rating

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<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Health</td>
<td>1</td>
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<tr>
<td>Flammability</td>
<td>3</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>B</td>
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NFPA codes

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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 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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

Issue date

09-15-2008