SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

sec-Butyl Alcohol

Flinn Scientific, Inc.  P.O. Box 219, Batavia, IL 60510  (800) 452-1261
CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word WARNING

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 3). Flammable liquid and vapor (H226). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing mist, vapors or spray (P261).

Hazard class: Specific target organ toxicity, single exposure; Narcotic effects (Category 3). May cause drowsiness or dizziness (H336). Avoid breathing mist, vapors or spray (P261).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS Number</th>
<th>Formula</th>
<th>Formula Weight</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>sec-Butyl alcohol</td>
<td>78-92-2</td>
<td>CH₃CHOHCH₂CH₃</td>
<td>74.12</td>
<td></td>
</tr>
</tbody>
</table>

Synonyms: 2-Butanol; sec-Butanol

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). If eye irritation persists: Get medical advice or attention (P337+P313).

If on skin (or hair): Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Class 1C flammable liquid; dangerous fire risk.

This material may develop explosive peroxides. Use only fresh material. Flash point: 24 °C  Flammable limits: Lower: 1.7%  Upper: 9.8%  Autoignition Temperature: 405 °C
When heated to decomposition, may emit toxic fumes. In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.
SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides. Use only fresh material.
Known to develop explosive peroxides.
Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor™ can.
Keep container tightly closed (P233). Keep cool (P235). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).
Exposure guidelines: PEL 150 ppm (OSHA) TLV 100 ppm (ACGIH) IDLH 2000 ppm

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid. Strong rubbing alcohol-like odor. Boiling point: 99.5 °C
Soluble: Slightly in water. Miscible with alcohol and ether. Melting point: -114 °C
Refractive index: 1.3978
Specific gravity: 0.81

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids, acid chlorides, acid anhydrides, oxidizing materials, and halogens. Explosive peroxides have been known to develop in storage.
Shelf life: Poor. Use only fresh material. Known to develop explosive peroxides. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye, skin, and respiratory tract irritation. Nausea, dizziness, and headache.
ORL-RAT LD₅₀: 6480 mg/kg
IHL-RAT LC₅₀: N.A.
SKN-RAT LD₅₀: >2 g/kg
Chronic effects: N.A.
Target organs: Eyes, skin, respiratory system, and central nervous system.
N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #18b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Butanols. Hazard class: 3, Flammable liquid. UN number: UN1120.
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

EINECS-listed (240-029-8), RCRA D001.

SECTION 16 — OTHER INFORMATION

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Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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