

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 182.00

Revision Date: December 13, 2013

### 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**

Pictograms



### 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; Narcotic effects (Category 3). May cause drowsiness or dizziness (H336). Avoid breathing mist, vapors or spray (P261).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
sec-Butyl alcohol	78-92-2	CH <sub>3</sub> CHOHCH <sub>2</sub> CH <sub>3</sub>	74.12	
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. 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 tri-class dry chemical fire extinguisher (P370+P378).

NFPA CODE

H-2

F-3

R-0

### 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.

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**SECTION 7 — HANDLING AND STORAGE**

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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 in a well-ventilated area (P271).

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264). Use only in a hood or in a well-ventilated area (P271).

Exposure guidelines: PEL 150 ppm (OSHA) TLV 100 ppm (ACGIH) IDLH 2000 ppm.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless liquid. Strong rubbing alcohol-like odor.

Soluble: Slightly in water. Miscible with alcohol and ether.

Boiling point: 99.5 °C

Melting point: -89 °C

Refractive index: 1.3978

Specific gravity: 0.81

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**SECTION 10 — STABILITY AND REACTIVITY**

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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.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Eye, skin, and respiratory tract irritation. Nausea, dizziness, and headache.

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.

ORL-RAT LD<sub>50</sub>: 2193 mg/kg

IHL-RAT LC<sub>50</sub>: N.A.

SKN-RAT LD<sub>50</sub>: >2 g/kg

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #18b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Butanols. Hazard class: 3, Flammable liquid. UN number: UN1120.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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**SECTION 16 — OTHER INFORMATION**

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