## 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

## SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

sec-Butyl alcohol Synonym: 2-butanol CAS#: 78-92-2

## SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid with a strong rubbing alcohol-like odor. Irritant to body tissue. Mildly toxic by inhalation. Absorbed through the skin. Flammable liquid. Dangerous fire risk. FLINN AT-A-GLANCE Health-1 Flammability-3 Reactivity-2 Exposure-1 Storage-3 0 is low hazard, 3 is high hazard

## SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid. Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately. Eye: Immediately flush with fresh water for at least 15 minutes. External: Wash continuously with fresh water for at least 15 minutes. Internal: Give large quantities of water. Call a physician or poison control at once.

## SECTION 5 — FIRE FIGHTING MEASURES

Class 1C flammable liquid; dangerous fire risk.	NFPA CODE
This material may develop explosive peroxides. Use only fresh material.	H-1
Flash Point: 75 °F Upper: 9.8% (212 °F) Lower: 17% (212 °F) Autoignition Temperature: 689 °F	F-3
Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and	<b>R-0</b>
SCBA with full facepiece operated in positive pressure mode.	

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. 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. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can. Use and dispense in a hood.

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations and low exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: TWA 100 ppm, (OSHA).

MSDS #: 182.00 Revision Date: June 9, 2010

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid with a strong rubbing alcohol-like odor. Formula: CH<sub>3</sub>CHOHCH<sub>2</sub>CH<sub>3</sub> Formula Weight: 74.14 Specific Gravity: 0.81 Melting Point: -89 °C Boiling Point: 99.5 °C

## 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.

#### SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant, nausea, dizziness, and headache. Chronic effects: N.A. Target organs: Eyes and central nervous system.

ORL-RAT  $LD_{50}$ : 6480 mg/kg IHL-RAT  $LC_{50}$ : N.A. SKN-RBT  $LD_{50}$ : N.A.

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 consult with state and local regulations. 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

This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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