

# Safety Data Sheet

## SECTION 1: Identification

### 1.1. Product Identifier

**Trade Name or Designation:** n-Butyl Alcohol, Neutralized

**Product Number:** 4060-00

**Other Identifying Product Numbers:**

### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** WEBER SCIENTIFIC

**Address:** 2732 KUSER RD  
TRENTON, NJ 08691- USA

**Telephone:**

### 1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300  
CHEMTREC (International) 1+ 703-527-3887

## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

*For the full text of the Hazard and Precautionary Statements listed below, see Section 16.*

Hazard Class	Category	Hazard Statement	Precautionary Statements
Acute Toxicity - Oral	Category 4	H302	P264, P270, P301+P312, P330, P501
Skin Corrosion / Irritation	Category 2	H315	P264, P280, P302+P352, P321, P332+P313, P362
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310
Specific Target Organs/Systemic Toxicity Following Repeated Exposure	Category 1	H372	P260, P264, P270, P314, P501
Flammable Liquids	Category 3	H226	P210, P233, P240, P241, P242, P243, P280, P303+P361+P353, P370+P378, P403+P235, P501

# Safety Data Sheet

## 2.2. GHS Label Elements

### Pictograms:



**Signal Word: Danger**

**Hazard Statements:**

Hazard Number	Hazard Statement
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H372	Causes damage to organs through prolonged or repeated exposure.

# Safety Data Sheet

## Precautionary Statements:

Precautionary Number	Precautionary Statement
P210	Keep away from heat, sparks and open flame. No smoking.
P233	Keep container tightly closed.
P240	Ground container and receiving equipment.
P241	Use explosion-proof equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust, fumes or mist.
P264	Wash arms, hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves and eye protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.
P314	Get medical attention if you feel unwell.
P321	Specific treatment (Wash areas of contact with water immediately).
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical attention.
P362	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

## 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

## 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

# Safety Data Sheet

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
1-Butanol	CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> OH	74.12 g/mol	71-36-3	99.75%
Water	H <sub>2</sub> O	18.01 g/mol	7732-18-5	0.25%
Sodium Hydroxide	NaOH	39.99 g/mol	1310-73-2	0.00%

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Results in drying and cracking which can lead to secondary infections and dermatitis. Dermal absorption causes many of the symptoms of ingestion.

**Ingestion:** IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Induce vomiting immediately as directed by medical personnel. Get medical attention.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

WARNING! Flammable. Keep away from heat, sparks, and open flames. Use with adequate ventilation. Avoid prolonged breathing of vapor or contact with skin. Harmful if swallowed, inhaled, or absorbed through skin. Wash areas of contact with plenty of water for 15 minutes. For eyes, get medical attention. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: Results in drying and cracking which can lead to secondary infections and dermatitis. Dermal absorption causes many of the symptoms of ingestion.

### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately).

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Carbon dioxide, dry chemical, alcohol foam

### 5.2. Specific Hazards Arising from the Substance or Mixture

Flammable liquid and vapor. Vapors may produce flash fires. Vapors can flow along surfaces to distant ignition source and flash back. Explosion hazard when exposed to heat, flame or oxidizers.

### 5.3. Special Protective Equipment for Firefighters

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

# Safety Data Sheet

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye protection.

### 6.2. Cleanup and Containment Methods and Materials

Remove all sources of ignition. Cover spill with a 1:1:1 mixture of Sodium Carbonate or Calcium Carbonate, Clay, and sand. Transport to a fume hood for evaporation. Do not flush to sewer. After evaporation, place in non-halogenated solvent disposal container for recycling or disposal by burning. Ventilate area of spill. Have extinguishing agent available in case of fire. Use non-sparking tools and equipment. Dispose of in accordance with local regulations.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Store in secure, flammable storage area away from all sources of ignition. Empty containers may be hazardous since they retain product residues.

## SECTION 8: Exposure Controls / Personal Protection

### 8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
1-Butanol (71-36-3)	TWA	USA	100 ppm TWA 300 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
1-Butanol (71-36-3)	TLV-TWA	USA	20 ppm TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Sodium Hydroxide (1310-73-2)	TWA	USA	2 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Sodium Hydroxide (1310-73-2)	TLV-Ceiling	USA	2 mg/m <sup>3</sup> Ceiling	ACGIH - Threshold Limit Values - Ceilings (TLV-C)

### 8.2. Exposure Controls

**Engineering Controls:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

**Respiratory Protection:** Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn. Chemical resistant gloves. Safety glasses or goggles.

# Safety Data Sheet

## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

**Appearance:** Colorless liquid

**Physical State:** Liquid

**Odor:** Sweet, rancid

**Odor Threshold:** Data not available.

**pH:** Data not available.

**Melting/Freezing Point:** <88.6°C

**Initial Boiling Point /Range:** Data not available.

**Flash Point:** 37°C

**Evaporation Rate:** 33 (ether = 1)

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** 0.658 hPa at 20°C

**Vapor Density:** 2.6

**Relative Density:** 0.81

**Solubility:** 63200 - 74000 Mg/L at 25°C

**Partition Coefficient (n-Octanol/Water):** 0.785 at 25 °C

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

### 10.2. Possibility of Hazardous Reactions

Data not available.

### 10.3. Conditions to Avoid and Incompatible Materials

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed. Strong oxidizing agents, heat, sparks, open flame, strong

### 10.4. Hazardous Decomposition Products

Will not occur.

# Safety Data Sheet

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure:

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Dermal Exposure:

Not applicable.

#### Acute Toxicity - Inhalation Exposure:

Not applicable.

#### Acute Toxicity - Other Information:

LD50, Oral, Rat: (n-Butanol) 790 mg/kg, liver, kidney, blood effects noted.

#### Skin Corrosion and Irritation:

Causes skin irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water immediately). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

#### Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

#### Respiratory Sensitization:

Not applicable.

#### Skin Sensitization:

Not applicable.

#### Germ Cell Mutagenicity:

Not applicable.

#### Carcinogenicity:

Not applicable.

#### Reproductive Toxicity:

Not applicable.

#### Specific Target Organ Toxicity from Single Exposure:

Not applicable.

#### Specific Target Organ Toxicity from Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

# Safety Data Sheet

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.

## SECTION 12: Ecological Information

**12.1. Ecotoxicity**

Not applicable.

**12.2. Persistence and Degradability**

Data not available.

**12.3. Bioaccumulative Potential**

Data not available.

**12.4. Mobility in Soil**

Data not available.

**12.5. Other Adverse Ecological Effects**

Data not available.

## SECTION 13: Disposal Considerations

**13.1. Waste Treatment Methods**

Data not available.

## SECTION 14: Transportation Information

**14.1. Transportation by Land - Department of Transportation (DOT, United States of America)**

**UN Number:** UN1120

**Proper Shipping Name:** Butanols

**Hazard Class:** 3

**Packing Group:** III

**Hazard Placard Labels:**





# Safety Data Sheet

## 14.2. Transportation by Air - International Air Transport Association (IATA)

UN Number: UN1120

Proper Shipping Name: Butanols

Hazard Class: 3

Packing Group: III

Hazard Placard Labels:



## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Sodium Hydroxide (CAS # 1310-73-2): 1000 lb final RQ; 454 kg final RQ

1-Butanol (CAS # 71-36-3): 5000 lb final RQ; 2270 kg final RQ

### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

1-Butanol (CAS # 71-36-3): 1.0 % de minimis concentration

### 15.5. Massachusetts Right-to-Know Substance List

Sodium Hydroxide (CAS # 1310-73-2): Present

1-Butanol (CAS # 71-36-3): Present

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Sodium Hydroxide (CAS # 1310-73-2): Environmental hazard

Sodium Hydroxide (CAS # 1310-73-2): Present

1-Butanol (CAS # 71-36-3): Present

Water (CAS # 7732-18-5): Present

### 15.7. New Jersey Worker and Community Right-to-Know Components

Sodium Hydroxide (CAS # 1310-73-2): corrosive

Sodium Hydroxide (CAS # 1310-73-2): sn 1706

1-Butanol (CAS # 71-36-3): flammable - third degree

1-Butanol (CAS # 71-36-3): sn 1330

1-Butanol (CAS # 71-36-3): SN 1330 TPQ: 500 lb

# Safety Data Sheet

## 15.8. California Proposition 65

Not listed.

## 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Sodium Hydroxide (CAS # 1310-73-2): Present

1-Butanol (CAS # 71-36-3): Present

Water (CAS # 7732-18-5): Present

## 15.10. United States of America Toxic Substances Control Act (TSCA) List

Sodium Hydroxide (CAS # 1310-73-2): Present

1-Butanol (CAS # 71-36-3): Present

Water (CAS # 7732-18-5): Present

## 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

Flammable liquid and vapor. Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Causes damage to organs through prolonged or repeated exposure.

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed. Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye protection.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water immediately). Rinse mouth. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.

Store in a well-ventilated place. Keep cool.

Dispose of contents in accordance with local, state, federal and international regulations.

# Safety Data Sheet

## 16.2. Miscellaneous Hazard Classes

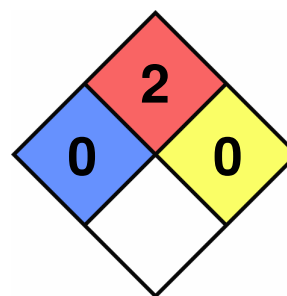
**Canadian Carcinogenicity Hazard Class:** Not Applicable.

**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.  
Not Applicable.

## 16.3. National Fire Protection Association (NFPA) Rating

**Health:** 0  
**Flammability:** 2  
**Reactivity:** 0  
**Special Hazard:**



## 16.4. Document Revision

**Last Revision Date:** 6/2/2015

### DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and WEBER SCIENTIFIC assumes no legal responsibility or liability whatsoever resulting from its use.