

## **MATERIAL SAFETY DATA SHEET**

### **N-BUTYRIC ACID**

**(For Synthesis)**

**MSDS CAS: - 107-92-6**

## **Section 1: Chemical Product and Company Identification**

### **Section 1: Chemical Product**

**Product Name: N-BUTYRIC ACID**

**CAS#: - 107-92-6**

**C.I. No.: Not available.**

**Synonym: Not available.**

**Chemical Name: Not available.**

**Chemical Formula: CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>COOH**

**Brand: OXFORD**

### **Details Of The Supplier Of The Safety Data Sheet:**

#### **Company identification:**

**OXFORD LAB FINE CHEM LLP**

**Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,  
Navghar, Vasai (East). Palghar - 401 210.**

**Mumbai, Maharashtra, INDIA.**

**Tel: 91-250-2390989**

**Tel/Fax: 91-250-2390032**

## **Section 2: Composition and Information on Ingredients**

### **Composition:**

Name	CAS #	% by Weight
N-BUTYRIC ACID	107-92-6	100

## Section 3: Hazards Identification

### Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (corrosive, permeator). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.

### Potential Chronic Health Effects:

**CARCINOGENIC EFFECTS:** Not available. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance is toxic to lungs, the nervous system, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

## Section 4: First Aid Measures

### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

### Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Combustible.

**Auto-Ignition Temperature:** 452°C (845.6°F)

**Flash Points:** CLOSED CUP: 71.7°C (161.1°F). OPEN CUP: 74.4°C (165.9°F).

**Flammable Limits:** LOWER: 2% UPPER: 10%

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>).

**Fire Hazards in Presence of Various Substances:** Not available.

**Explosion Hazards in Presence of Various Substances:**

**Risks of explosion of the product in presence of mechanical impact:** Not available. **Risks of explosion of the product in presence of static discharge:** Not available.

**Fire Fighting Media and Instructions:**

**SMALL FIRE:** Use DRY chemical powder. **LARGE FIRE:** Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:**

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

**Large Spill:**

Combustible material. Corrosive liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

## Section 7: Handling and Storage

**Precautions:**

Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

## Section 7: Handling and Storage (Continued)

### Storage:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

## Section 8: Exposure Controls/Personal Protection

### Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

## Section 9: Physical and Chemical Properties

Physical state and appearance	: Liquid.
Odor	: Not available.
Taste	: Not available.
Molecular Weight	: 88.12g/mole
Color	: Not available.
pH (1% soln/water)	: Not available.
Boiling Point	: 163.5°C (326.3°F)
Melting Point	: -7.9°C (17.8°F)
Critical Temperature	: Not available.
Specific Gravity	: 0.959 (Water = 1)
Vapor Pressure	: 0.1 kPa (@ 20°C)
Vapor Density	: 3.04 (Air = 1)
Volatility	: Not available.
Odor Threshold	: Not available.

## Section 9: Physical and Chemical Properties (Continued)

Water/Oil Dist. Coeff.	: Not available.
Ionicity (in Water)	: Not available.
Dispersion Properties	: See solubility in water.
Solubility	: Easily soluble in cold water

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.  
**Instability Temperature:** Not available.  
**Conditions of Instability:** Not available.  
**Incompatibility with various substances:** Not available.  
**Corrosivity:** Non-corrosive in presence of glass.  
**Special Remarks on Reactivity:** Not available.  
**Special Remarks on Corrosivity:** Not available.  
**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Eye contact. Inhalation. Ingestion.  
**Toxicity to Animals:**  
**Acute oral toxicity (LD50):** 2000 mg/kg [Rat]. **Acute dermal toxicity (LD50):** 530 mg/kg [Rabbit].  
**Chronic Effects on Humans:** Causes damage to the following organs: lungs, the nervous system, mucous membranes.  
**Other Toxic Effects on Humans:**  
Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of inhalation. Slightly hazardous in case of skin contact (corrosive, permeator).  
**Special Remarks on Toxicity to Animals:** Not available.  
**Special Remarks on Chronic Effects on Humans:** Not available.  
**Special Remarks on other Toxic Effects on Humans:** Not available.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

## Section 14: Transport Information

### 14.1. Land transport (ADR-RID)

Proper shipping name	: BUTYRIC ACID
UN N°	: 2820
H.I. nr	: 80
ADR - Class	: 8
Labelling - Transport	: 8 : Corrosive substance.

### 14.2. Sea transport (IMDG) [English only]

Proper shipping name	: BUTYRIC ACID
UN N°	: 2820
IMO-IMDG - Class or division	: 8 : Corrosive substance.
IMO-IMDG - Packing group	: III

### 14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name	: BUTYRIC ACID
UN N°	: 2820
IATA - Class or division	: 8 : Corrosive substance.
IATA - Packing group	: III

## Section 15: Other Regulatory Information

### Federal and State Regulations:

Pennsylvania RTK: Butyric acid Massachusetts RTK: Butyric acid TSCA 8(b) inventory: Butyric acid  
CERCLA: Hazardous substances.: Butyric acid

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

### Other Classifications:

#### WHMIS (Canada):

CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC). CLASS E: Corrosive liquid.

#### DSCL (EEC):

R21/22- Harmful in contact with skin and if swallowed. R36/38- Irritating to eyes and skin.

#### HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 2

Reactivity: 0

#### Personal Protection:

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 2

Reactivity: 0

Specific hazard:

#### Protective Equipment:

Gloves. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Face shield.

## Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

**Regd Office:** Unit no 12, 1st Floor,  
Neminath Industrial Estate No.6,  
Navghar, Vasai (East), Palghar - 410210.  
Maharashtra, INDIA.

**Tel:** +91 250 2390032 / 2390989 / 2390990  
**Email:** sales@oxfordlabchem.com /  
info@oxfordlabchem.com  
**Web:** www.oxfordlabchem.com

## ***Disclaimer:***

---

**The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.**

**Oxford Lab Fine Chem LLP makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.**