

**Section 1. Product and Company Identification**

Product Name	n-Butyric Acid
Product ID	B8275
Chemical Name (Synonyms)	Butanoic acid; Butyric acid; Ethylacetic acid
Supplier	LKT Laboratories, Inc 545 Phalen Blvd. St. Paul, MN 55130 USA Ph: 651-644-8424 Fax: 651-644-8357 www.lktlabs.com - getinfo@lktlabs.com
Emergency Phone #	1-800-424-9300

Section 2. Hazards Identification

GHS Classification	Flammable liquids (Category 4), H227 Acute toxicity, Oral (Category 4), H302 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318
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GHS Label elements including precautionary statements**Pictogram****Signal word** Danger**Hazard and precautionary statements****Hazard statements**

H227 - Combustible liquid.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns.
H318 - Causes serious eye damage.

Precautionary statements

P210 - Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink, or smoke when using this product.
P280 - Wear protective gloves, protective clothing, eye protection, and face protection.
P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 - 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/ doctor.
P363 - Wash contaminated clothing before reuse.
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification	Health hazard: 3 Chronic health hazard: * Flammability: 2 Physical hazard: 0
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NFPA Rating	Health hazard: 3 Fire hazard: 2 Reactivity hazard: 0
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Potential Health Effects	Inhalation - May be harmful if inhaled. May cause respiratory tract irritation. Skin - Causes severe skin burns. May be harmful if absorbed through skin. May cause skin irritation. Eyes - Causes serious eye damage.
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Ingestion - Acute toxicity. Harmful if swallowed.

Section 3. Composition/Information on Ingredients

Substances	Ingredient: Title Compound	Percent: 100		
Formula	C ₄ H ₈ O ₂		Formula Wt.	88.10
CAS No.	107-92-6		EC No.	203-532-3

Section 4. First Aid Measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Eye Contact	Flush eyes with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5. Firefighting Measures

Flash Point	72°C - closed cup.
Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Firefighting Procedures	Wear self-contained breathing apparatus for firefighting if necessary.
Unusual Fire Hazards	Use water spray to cool unopened containers.

Section 6. Accidental Release Measures

Personal Precautions	Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleanup	Contain spillage and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: Ambient
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. Carbon oxides.
Other Remarks	Storage class (TRGS 510): Combustible, corrosive hazardous materials.

Section 8. Exposure Controls/Personal Protection

Personal protective equipment

EXPOSURE CONTROLS

Contains no substances with occupational exposure limit values. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTION

Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact - Material: Butyl-rubber, Minimum layer thickness: 0.3 mm, Break through time: 480 min., Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M)---Splash contact - Material: Nature latex/chloroprene, Minimum layer thickness: 0.6 mm, Break through time: 48 min, Material tested: Lapren® (KCL 706 / Aldrich Z677558, Size M)

Body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Clear, colorless liquid.
Boiling Point	163.5°C	Volatility	Not available.
Melting Point	-7°C	Density	Not available.
Solubility	Miscible with water, alcohol, or ether.	pH	3 at 10 g/l at 20°C
Flash Point	72°C - closed cup.	Ignition temperature	Not available.
Lower explosion limit	2% (V)	Autoignition temperature	435°C at 1,008 hPa
Upper explosion limit	10% (V)	Vapor pressure	0.57 hPa (0.43 mmHg) at 20°C
Water solubility	Miscible with water. 1,000 g/l at 20°C - OECD Test Guideline 105 - soluble	Odor	Stench.
Partition coefficient: n-octanol/water	log Pow: 1.1 at 25°C	Odor Threshold	Not available.
Relative vapor density	3.04 (Air = 1.0)	Evaporation rate	Not available.

Section 10. Stability and Reactivity

Stability	Stable under recommended storage conditions.
Materials To Avoid	Strong oxidizing agents.
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. Carbon oxides.

Possibility of hazardous reactions Not available.

Conditions to avoid Heat, flames, and sparks.

Section 11. Toxicological Information

Oral LD50 Rat - male and female - 1,632 mg/kg (OECD Test Guideline 401)

Skin corrosion/irritation Skin - Rabbit
Result: Causes burns.
(OECD Test Guideline: 404)

Inhalation LC50 Not available.

Serious eye damage/irritation Eyes - Rabbit
Result: Risk of serious damage to eyes.

Dermal LD50 Rabbit - Male - 6,096 mg/kg (OECD Test Guideline 402)

Respiratory or skin sensitization Not available.

Other information on acute toxicity Not available.

Germ cell mutagenicity Reverse mutation assay
S. typhimurium
Result: negative

Reproductive Toxicity Not available.

Aspiration Hazard Not available.

Specific organ toxicity single exposure (GHS) Not available.

Synergistic effects Not available.

Specific organ toxicity repeated exposure (GHS) Not available.

Additional Information RTECS: ES5425000

Teratogenicity Not available.

Signs and symptoms of exposure Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough, shortness of breath, headache, and nausea.

Stomach - irregularities - based on human evidence.

Potential Health Effects Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
Skin - Causes severe skin burns. May be harmful if absorbed through skin. May cause skin irritation.
Eyes - Causes serious eye damage.
Ingestion - Acute toxicity. Harmful if swallowed.

Carcinogenicity **IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Section 12. Ecological Information

Toxicity Toxicity to daphnia and other aquatic invertebrates.
EC50 - Daphnia magna (Water flea) - 61.7 mg/l - 24 h.
Other aquatic invertebrates.

Mobility in soil Not available.

PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not

conducted.

Persistence and degradability Biodegradability
Biotic/aerobic

Other adverse effects Avoid release to the environment.

Bioaccumulative potential Not available.

Section 13. Disposal Considerations

Waste Disposal Dispose of material according to all federal, state, and local regulations.
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed, professional waste disposal service to dispose of this material. Dispose of as unused product.

Section 14. Transport Information

DOT (US) UN number: 2820 Class: 8 Packing group: III
Proper shipping name: Butyric acid
Reportable Quantity (RQ): 5000 lbs. Poison inhalation hazard: No.

IATA UN number: 2820 Class: 8 Packing group: III
Proper shipping name: Butyric acid

IMDG UN number: 2820 Class: 8 Packing group: III EMS No.: F-A, S-B
Proper shipping name: BUTYRIC ACID

Further Information

Section 15. Regulatory Information

Reach No.

SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Components Fire hazard, acute health hazard, chronic health hazard.

Massachusetts Right To Know Components n-Butyric Acid CAS #: 107-92-6 Revision Date: 1993-04-24

Pennsylvania Right To Know Components n-Butyric Acid CAS #: 107-92-6 Revision Date: 1993-04-24

New Jersey Right To Know Components n-Butyric Acid CAS #: 107-92-6 Revision Date: 1993-04-24

California Prop 65 Components This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

Other information The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.

Updated 6/11/2020

For emergencies in the USA, call
CHEMTREC 800-424-9300