

G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME: **N-Butyl Acetate** ALL GRADES

PRODUCT NUMBER(S): 207900, 207910, 207930, 207960 and 208100

TRADE NAMES/SYNONYMS: Acetic Acid Butyl Ester, Butyl Ethanoate, 1-Butyl Acetate

CAS-No: 123-86-4

CHEMICAL FAMILY: Ester

1.2 RELAVENT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST:

Industrial uses: Use in coatings, Use in cleaning agents, Use in thermosets, Laboratory Chemical, Use in printing inks, Use as a processing air, Use as an intermediate, Use as a solvent.

USES ADVISED AGAINST: No information available

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.

Address: 40 VERONICA AVENUE
SOMERSET, NJ 08873

Telephone: 1-973-589-1450

Fax: 1-973-589-3072

1.4 Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Acute aquatic toxicity (Category 3), H402

2.2 GHS Label elements, including precautionary statements



Pictograms

GHS02

GHS07

Signal word: **WARNING**

Hazard statement(s)

H226 Flammable liquid and vapor.

H336 May cause drowsiness or dizziness.

H402 Harmful to aquatic life.

Precautionary statement(s)

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: Repeated exposure may cause skin dryness or cracking.

3. INGREDIENTS

3.1 SUBSTANCE:

COMPONENT	CAS NO.	% BY WT.	CLASSIFICATION
N-Butyl Acetate EC-No. 204-658-1 Index-No.607-025-00-1 Reg.-No. 01-2119485493-29-XXXX	123-86-4	99.5%min.	Flammable liquids (Category 3), H226 STOT-SE (Category 3) central nervous system, H336 Acute aquatic toxicity (Category 3), H402
Other organic contaminants not tested for:		0.3%max.	
Non-volatile residue:		0.001%max.	

3.2 MIXTURE: Not applicable.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

INHALATION: N-BUTYL ACETATE: IRRITANT/NARCOTIC.

****FIRST AID- Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.**

SKIN CONTACT: N-BUTYL ACETATE

****FIRST AID- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.**

EYE CONTACT: N-BUTYL ACETATE: IRRITANT.

****FIRST AID- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flushing. Get medical attention immediately.**

INGESTION: N-BUTYL ACETATE: NARCOTIC.

****FIRST AID- Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention immediately.**

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Ingestion: Nausea, diarrhea, central nervous system depression, drowsiness.

Eyes: Splashes in eyes may cause severe irritation, possible corneal burns and eye damage. Can cause injury that may persist for several days.

Inhalation: Exposure to high concentrations has a narcotic effect when inhaled, production symptoms of drowsiness, headache, staggering, unconsciousness

Skin: Contact with skin has a de-fatting action that can cause irritation. May cause irritation with a stinging effect and burning sensation. Substance may be dermally absorbed resulting in systemic toxicity as detailed in acute ingestion.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: Give sodium sulfate as laxative (1 tablespoon in 1 glass of water).

5. FIRE FIGHTING MEASURES

FLASH POINT: 23°C (73°F) (CC)

UPPER EXPLOSIVE LIMIT: 7.6% (V)

AUTOIGNITION TEMP: 415°C (779°F)

LOWER EXPLOSIVE LIMIT: 1.7% (V)

UNIFORM FIRE CODE: Flammable Liquid IB

5.1 SUITABLE EXTINGUISHING MEDIA: Foam--> x CO2--> x Dry Chemical-->
x Water-fog--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE. Keep containers tightly closed. Flammable liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat. Liquid floats on water.

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind. Do not spray pool fires directly. A solid stream of water or foam directed into hot burning liquid can cause frothing. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Cool containers with water-fog from as far a distance as possible. Wear NIOSH/MSHA approved self-contained breathing apparatus (SCBA) for confined spaces. Use full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Flammable Liquid; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.

Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

REPORTABLE QUANTITY (RQ): 5000lbs.

The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local emergency planning committee and the state emergency response commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the national response center must be notified immediately at (800) 424-8882 or (202) 426-2675 in the metropolitan Washington, D. C. area (40 CFR 302.6).

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

This material presents a fire hazard. Liquid quickly evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid work practices that may release volatile components in the atmosphere. A Use non-sparking tools to open or close containers. Do not take internally.

Advice on general occupational hygiene:

Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 “Flammable and Combustible Liquids” and National Fire Protection Association (NFPA 77) “Recommended Practice on Static Electricity”.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities.

Recommended storage temperature: 15 - 25 °C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Storage class (TRGS 510): 3: Flammable liquids

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

COMPONENT	CAS NO.	% BY WT.	EXPOSURE LIMITS
N-Butyl Acetate	123-86-4	99.5%min.	150PPM TWA (ACGIH)
	EC-No. 204-658-1		200PPM STEL (ACGIH)
	Index-No.607-025-00-1		150PPM TWA (NIOSH)
	Reg.-No. 01-2119485493-29-XXXX		200PPM STEL (NIOSH)
			150PPM TWA (OSHA)
			1700PPM IDLH

Key: (PEL) = Permissible Exposure Limit OSHA
 (TLV) = Threshold Limit Value OSHA & ACGIH
 (STEL) = Short Term Exposure Limit ACGIH
 (WEEL) = USA. Workplace Environmental Exposure Levels
 (TWA) = Time Weighted Average
 CAS = Chemical Abstracts Registry Number
 IDLH = Immediate Danger to Life and Health
 N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The following respirators and maximum use concentrations are recommendations by the U.S. Department of Health and Human Services, NIOSH Pocket Guide to Chemical Hazards; NIOSH criteria documents or by the U.S. Department of Labor, 29 CFR 1910 Subpart Z.

The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

1500 PPM- Any powered, air-purifying respirator with organic vapor cartridge(s). Any chemical cartridge respirator with a full face-piece and organic vapor cartridge(s).

10,000 PPM- Any supplied-air respirator operated in a continuous flow mode.

>10,000 PPM- Any air-purifying, full-face-piece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister.
Any self-contained breathing apparatus with a full face-piece.
Any supplied-air respirator with a full face-piece.

ESCAPE- Any air-purifying, full face-piece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister.
Any appropriate escape-type, self-contained breathing apparatus.

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance.

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 30 min

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use safety eyewear with splash-guards or face shield. Contact lenses should not be worn.
Emergency shower and eyewash should be easily accessible to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

n-Butyl Acetate 123-86-4

APPEARANCE:	Clear liquid
COLOR:	Colorless
ODOR:	Fruity odor
ODOR THRESHOLD:	No data available
pH:	6.2 at 5 g/l at 20°C (68°F)
MOLECULAR WEIGHT:	116.16
MELTING POINT:	-78° C (-108°F)
BOILING POINT:	124-126°C (255-259°F)
SPECIFIC GRAVITY:	0.882 @ 20°C
VAPOR PRESSURE:	15 mm Hg @ 25°C (77°F)
VAPOR DENSITY:	4.01
WATER SOLUBILITY:	5.3 g/l @ 20°C (68°F) - Soluble
PARTITION COEFFICIENT N-OCTANOL/WATER: log Pow:	2.3 @ 25°C (77°F)
EVAPORATION RATE (Butyl acetate=1):	1.00
FLASH POINT:	23°C (73°F) (CC)
UPPER FLAMMABILITY LIMIT:	7.6% (V)
LOWER FLAMMABILITY LIMIT:	1.7% (V)
AUTO-IGNITION TEMPERATURE:	415°C (779°F)
DECOMPOSITION TEMPERATURE:	No data available
VISCOSITY:	0.83 mm ² /s at 20°C (68°F)
EXPLOSIVE PROPERTIES:	No data available
OXIDIZING PROPERTIES:	No data available
SOLVENT SOLUBILITY:	Soluble in Alcohols, Ethers, Hydrocarbons; Slightly soluble in water.

9.2 OTHER DATA:

Surface tension: 61.3 mN/m at 20 °C (68 °F)

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable () Stable (X)

Stable under normal temperatures and pressures. May slowly peroxidize on exposure to air under normal storage conditions. An explosion hazard may exist if the substance is distilled or allowed to evaporate to dryness.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form flammable mixtures with air.

HAZARDOUS POLYMERIZATION: May occur () Will not occur (X)

10.4 CONDITIONS TO AVOID: --> Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame. Extremes of temperature and direct sunlight.

10.5 INCOMPATIBLE MATERIALS --> Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid, hydrogen peroxide. Nitric acid, perchloric acid; also chromium trioxide

10.6 HAZARDOUS DECOMPOSITION PRODUCTS --> Thermal decomposition products may include: Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x Eye--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Inhalation: Exposure to high concentrations has a narcotic effect when inhaled, production symptoms of drowsiness, headache, staggering, unconsciousness and possibly death.

Skin: Contact with skin has a de-fatting action that can cause irritation. May cause irritation with a stinging effect and burning sensation. Substance may be dermally absorbed resulting in systemic toxicity as detailed in acute ingestion. Toxic effects may become more marked if absorption and inhalation occur concurrently.

Eye: Splashes in eyes may cause severe irritation, possible corneal burns and eye damage. Can cause injury that may persist for several days.

Ingestion: May cause drowsiness, unconsciousness, and death. Gastrointestinal pain, cramps, nausea, vomiting, and diarrhea may also result. Central nervous system depression may occur with headache, dizziness, flushing, in-coordination, stupor, confusion, hypotension, and refractory narcosis.

Chronic Effects: Repeated or prolonged exposure to skin may cause dermatitis. Prolonged or repeated exposure to vapors may cause conjunctivitis. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, skin and eyes.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	 Oral LD50 (Rat)	 Skin LD50 (Rabbit)	 Inhalation LC50
N-Butyl Acetate	 10.7-14.13g/kg	 17.6g/kg	 9.6-29.2mg/L/4hr

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TOXICITY DATA: 6335 PPM/ 4 hours inhalation-rat LCLO; TDLO 14 G/KG oral-rat LD50; Inhalation of aerosol 391ppm oral rat.

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)

RESPIRATORY OR SKIN SENSITIZATION: No data available

MUTAGENIC EFFECTS: Ames test *S. typhimurium* Result: negative

CARCINOGEN STATUS:

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.

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.

REPRODUCTIVE TOXICITY: Reproduction in an inhalation screening study at/near a maternally toxic dose (1500ppm for 7 hours/day), n-butyl acetate was not teratogenic in rats and rabbits but did cause embryo fetotoxicity.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): May cause drowsiness or dizziness – central nervous system.

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): no data available

ASPIRATION HAZARD: No data available.

11.2 ADDITIONAL DATA: Narcosis. Drowsiness. Dizziness.
RTECS# AF7350000

12. ECOLOGICAL INFORMATION

SLIGHT ACUTE TOXICITY TO AQUATIC LIFE

May be dangerous if it enters water intakes.

Notify local health and wildlife officials.

Notify operators of nearby water intakes.

12.1 AQUATIC TOXICITY:

Toxicity to Fish;

LC50 – Pimephales Promelas (Fathead minnow) - 18mg/l – 96 h - Flow through test (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (water flea) - 44 mg/l – 48 h - Static test

Toxicity to algae:

IC50 - Scenedesmus subspicatus (green algae) – 674.7mg/l – 72 h – Static Test

12.2 PERSISTENCE AND DEGRADABILITY:

Aerobic - Exposure time 28 d Result: 83 % - Readily biodegradable. (OECD Test Guideline 301D)

Comments: Biological Oxygen Demand (BOD) BOD5/COD: >0.5

12.3 BIOACCUMULATIVE POTENTIAL:

Bio-accumulative potential: Will not bio-accumulate.

Bio-concentration factor (BCF) Value: 15 Method of testing: BCF

log Pow: 2.3

12.4 MOBILITY IN SOIL:

Mobility The product is water soluble and may spread in water systems. Surface tension Value: 61.3 mN/m @ 20°C

The Organic Carbon normalized adsorption coefficient 1,269 - 1,845

12.5 RESULTS OF PBT AND vPvB :

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: Harmful to aquatic life.

13. DISPOSAL GUIDELINES

13.1 **WASTE TREATMENT METHODS:** Hazard characteristic and regulatory waste

stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. The waste material should be treated and/or disposed of at site authorized to handle hazardous chemical waste. Appropriate Federal, State and Local Regulatory Authorities should be contacted before discharge, treatment or disposal of waste material.

CONTAMINATED PACKAGING: Dispose of as unused product.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID number is: D001

If the waste is a spent solvent, the appropriate spent solvent code should be used. **DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262**

14. TRANSPORT INFORMATION

Land Transport (DOT)

- 14.1 USDOT ID Number-----> UN1123
- 14.2 USDOT Shipping Name-----> Butyl Acetates
- 14.3 USDOT Hazard Classification-----> 3 (Flammable Liquid)
USDOT Label Codes-----> 3 (Flammable Liquid)
- 14.4 USDOT Package Code-----> III
- 14.5 Marine Pollutant-----> No
- 14.6 Special precautions for user-----> None
Emergency Response Guide-----> 127
Reportable quantity-----> 5000lbs.

Sea Transport (IMDG)

- 14.1 ID Number-----> UN1123
- 14.2 Proper shipping name-----> BUTYL ACETATES
- 14.3 Hazard Classification-----> 3 (Flammable Liquid))
Label Codes-----> 3
- 14.4 Package Code-----> III
- 14.5 Marine Pollutant-----> No
- 14.6 Special precautions for user-----> Yes
EMS-Number-----> F-E, S-D

Air Transport (IATA)

14.1 ID Number-----> UN1123
14.2 Proper shipping name-----> Butyl Acetates
14.3 Hazard Classification-----> 3 (Flammable Liquid)
Label Codes-----> 3
14.4 Package Code-----> III
14.5 Environmental hazard-----> None
14.6 Special precautions for user-----> None

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Not listed

SECTION 311/312: Hazard Categorization (40 CFR 370) - Fire Hazard

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed

SECTION 101(14) Reportable Quantity: 5,000 lb

Massachusetts Right to Know Components

n-Butyl acetate CAS-No.123-86-4

Pennsylvania Right to Know Components

n-Butyl acetate CAS-No.123-86-4

New Jersey Right to Know Components

n-Butyl acetate CAS-No.123-86-4

California Prop. 65 Components

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

TSCA (Toxic Substance Control Act)

N-Butyl Acetate CAS-No.123-86-4 is listed on the TSCA Inventory.

International Inventories:

<u>Country or Region</u>	<u>Inventory Name</u>	<u>On inventory yes/no</u>
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<u>Australia</u>	Australian Inventory of Chemical Substances (AICS)	Yes
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<u>Canada</u>	Domestic Substances List (DSL)	Yes
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<u>Canada</u>	Non-Domestic Substances List (NDSL)	No
<u>China</u>	Inventory of Existing Chemical Substances in China (IECSC)	Yes
<u>Europe</u>	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
<u>Europe</u>	European List of Notified Chemical Substances (ELINCS)	No
<u>Japan</u>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<u>Japan</u>	Industrial Safety & Health Law Inventory (ISHL)	Yes
<u>Korea</u>	Existing Chemicals List (ECL)	Yes
<u>Mexico</u>	National Inventory of Chemical Substances (INSQ)	Yes
<u>New Zealand</u>	New Zealand Inventory	Yes
<u>Philippines</u>	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
<u>Switzerland</u>	Inventory of Notified New Substances (CHINV)	Yes
<u>Taiwan</u>	National Existing Chemical Inventory (NECI)	Yes
<u>United States & Puerto Rico</u>	Toxic Substances Control Act Inventory	Yes

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION:

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=0
HMIS RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=0 PPE=G

Hazard statement(s) from Section 2 and 3:

H226 Flammable liquid and vapor.

H336 May cause drowsiness or dizziness.

H402 Harmful to aquatic life.

Date of preparation-----> April 14, 2003

Revision Number-----> 2.2

Revision Content-----> Update to Section 11

Revision Date-----> April 12, 2019

Prepared by-----> T.G. Fenstermaker, Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygienists
 AIHA - American Industrial Hygiene Association
 ANSI - American National Standards Institute

API	-	American Petroleum Institute
CERCLA	-	Comprehensive Emergency Response, Compensation, and Liability Act
DOT	-	U.S. Department of Transportation
EC-50	-	Effective Concentration
EPA	-	U.S. Environmental Protection Agency
HMIS	-	Hazardous Materials Information System
IARC	-	International Agency For Research On Cancer
LD-50	-	Lethal Dose
MAK	-	Germany Maximum Concentration Values
MSHA	-	Mine Safety and Health Administration
NFPA	-	National Fire Protection Association
NIOSH	-	National Institute of Occupational Safety and Health
NOIC	-	Notice of Intended Change (Proposed change to ACGIH TLV)
NTP	-	National Toxicology Program
OPA	-	Oil Pollution Act of 1990
OSHA	-	U.S. Occupational Safety & Health Administration
PEL	-	Permissible Exposure Limit (OSHA)
RCRA	-	Resource Conservation and Recovery Act
REL	-	Recommended Exposure Limit (NIOSH)
SARA	-	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA	-	Self-Contained Breathing Apparatus
STEL	-	Short-Term Exposure Limit (generally 15 minutes)
TLV	-	Threshold Limit Value
TSCA	-	Toxic Substances Control Act
TWA	-	Time Weighted Average (8hr.)
WHMIS	-	Canadian Workplace Hazardous Materials Information System

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