

Burdick & Jackson***Material Safety Data Sheet*****n-Butyl Acetate****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** Butyl Acetate**OTHER/GENERIC NAMES:** Acetic Acid n-Butyl Ester, Butyl Ethanoate**PRODUCT USE:** Solvent**MANUFACTURER:** Honeywell, Burdick & Jackson
1953 South Harvey Street
Muskegon, MI 49442**FOR MORE INFORMATION CALL:**
(Monday-Friday, 8:00am-5:00pm)
1-800-368-0050**IN CASE OF EMERGENCY CALL:**
(24 Hours/Day, 7 Days/Week)
1-800-707-4555 or Chemtrec 1-800-424-9300**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
n-Butyl Acetate	123-86-4	100

Trace impurities and additional material names not listed above may also appear in Section 15 toward the end of the MSDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW:**

Butyl Acetate is a colorless liquid with a strong fruity odor. Causes irritation to the eyes, skin and respiratory tract. Inhalation may lead to unconsciousness. Flammable.

POTENTIAL HEALTH HAZARDS**SKIN:** Irritant. Prolonged exposure may cause dryness of skin.**EYES:** Irritant**INHALATION:** Can cause respiratory tract irritation, nausea, shortness of breath, headache, drowsiness, and intoxication.**INGESTION:** Causes sore throat, nausea, stomach pain, headache, drowsiness and intoxication.**DELAYED EFFECTS:** None known.

Burdick & Jackson**MATERIAL SAFETY DATA SHEET****n-Butyl Acetate**

Ingredients found on one of the OSHA designated carcinogen lists are listed below.

<u>INGREDIENT NAME</u>	<u>NTP STATUS</u>	<u>IARC STATUS</u>	<u>OSHA LIST</u>
No ingredients listed in this section.			

4. FIRST AID MEASURES

SKIN: Wash affected area with mild soap and water and rinse area until no evidence of chemical remains.

EYES: Rinse eyes with plenty of water or normal saline solution for at least 15 minutes. Get medical attention.

INHALATION: Remove from exposure area to fresh air. If victim is not breathing administer artificial respiration according to your level of training and obtain professional medical assistance immediately.

INGESTION: Do not induce vomiting unless instructed to do so by a physician. Get medical assistance immediately.

ADVICE TO PHYSICIAN: No specific antidote. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES**FLAMMABLE PROPERTIES**

FLASH POINT:	72°F (22°C)
FLASH POINT METHOD:	Closed Cup
AUTOIGNITION TEMPERATURE:	797°F (425°C)
UPPER FLAME LIMIT (volume % in air):	7.6%
LOWER FLAME LIMIT (volume % in air):	1.7%
FLAME PROPAGATION RATE (solids):	Not applicable
OSHA FLAMMABILITY CLASS:	IB

EXTINGUISHING MEDIA:
Dry chemical, carbon dioxide, or foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Vapors are heavier than air and can be ignited by a flame or heat source remote to the location of a leak or spill.

SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS:
Water spray will not be effective as a fire-fighting agent, but may be useful in cooling containers or structure components that are adjacent to involved material. Water will not react adversely to n-Butyl Acetate or exacerbate fire-fighting efforts. Do not release runoff from spills or firefighting efforts to sewers or waterways.

Burdick & Jackson**MATERIAL SAFETY DATA SHEET**

n-Butyl Acetate

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE: (Always wear recommended personal protective equipment.) Eliminate sources of ignition. Isolate the spill area. Stop leak in a safe and practical manner. (If leak cannot be stopped easily and safely, advise trained emergency response personnel of the situation.) Using inert material (such as ground corncobs) dike the spilled solvent to prevent it from running into drains or waterways.

Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.

7. HANDLING AND STORAGE

NORMAL HANDLING: (Always wear recommended personal protective equipment.) Flammable liquid and vapors. Keep container closed. Do not breathe vapors. Avoid contact with skin, eyes and mucous membranes. Keep away from heat, sparks and flame. Electrically bond and ground all handling equipment. Protective neoprene or rubber gloves and apron are recommended.

STORAGE RECOMMENDATIONS:

Store in an area designed for storage of flammable liquids. (OSHA 29 CFR 1910.106) Protect from temperature extremes and sunlight, and store away from incompatible substances and in accordance with 29 CFR 1910.106. Avoid acids, bases, oxidizers, explosives, nitrogen-fluorine compounds, sulfites, perchlorates, reducing agents and plastics.

Flammable liquid and vapor. Once liquid solvent has been completely dispensed, containers which appear "empty" should be handled in the same manner as when they were "full" of liquid solvent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Burdick & Jackson

MATERIAL SAFETY DATA SHEET

n-Butyl Acetate

PERSONAL PROTECTIVE EQUIPMENT

SKIN PROTECTION:

Where liquid contact is possible impervious coveralls are recommended. To minimize the possibility in other handling and storage operations, wear appropriate PPE to include chemical resistant gloves, boots and apron.

EYE PROTECTION:

Wear protective eyeglasses (with side shields), chemical goggles alone or in conjunction with full face shield. Follow OSHA regulation 29CFR 1910.133. (Contact lenses are not protective devices.)

RESPIRATORY PROTECTION:

Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

ADDITIONAL RECOMMENDATIONS:

This material should be used in close proximity to eyewash station and safety shower. Use appropriate personal hygiene after handling this material. Do not smoke in the vicinity of flammable materials.

EXPOSURE GUIDELINES

<u>INGREDIENT NAME</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER LIMIT</u>
n-Butyl Acetate	150 ppm TWA 200 ppm STEL	150 ppm TWA 200 ppm STEL	None

- * = Limit established by Honeywell International, Inc.
** = Workplace Environmental Exposure Level (AIHA).
*** = Biological Exposure Index (ACGIH).

OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Colorless
PHYSICAL STATE:	Liquid (Clear)
MOLECULAR WEIGHT:	116.18
CHEMICAL FORMULA:	C ₆ H ₁₂ O ₂
ODOR:	Strong fruity odor
SPECIFIC GRAVITY (water = 1.0):	0.8825 @ 20°C
SOLUBILITY IN WATER (weight %):	0.43% @ 20°C
pH:	Not applicable

Burdick & Jackson**MATERIAL SAFETY DATA SHEET****n-Butyl Acetate**

BOILING POINT:	126°C (261°F)	
MELTING POINT:	-77°C (108°F)	
VAPOR PRESSURE:	10 mm Hg @ 20°C	
VAPOR DENSITY (air = 1.0):	4.0	
EVAPORATION RATE:	1.0	COMPARED TO: Butyl Acetate = 1
% VOLATILES:	100%	
FLASH POINT:	22°C (72°F)	

(Flash point method and additional flammability data are found in Section 5.)

10. STABILITY AND REACTIVITY**NORMALLY STABLE? (CONDITIONS TO AVOID):**

Stable at room temperatures in closed containers under normal and recommended storage and use conditions.

INCOMPATIBILITIES:

Nitrates, strong oxidizers, alkalis and acids.

CONDITIONS TO AVOID:

Avoid contact with heat, sparks, flame and other sources of ignition. Overheated containers can rupture violently and be propelled great distances in a fire situation.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition may cause toxic fumes to form.

HAZARDOUS POLYMERIZATION:

Does not occur.

11. TOXICOLOGICAL INFORMATION**IMMEDIATE (ACUTE) EFFECTS:**

- Oral (Rat) LD₅₀: 10,768 mg/Kg
- Inhalation (Rat) LC₅₀: 2,000 ppm/4 hr.
- Oral (Mouse) LD₅₀: 6 g/Kg
- Dermal (Rabbit) LD₅₀: >17,600 mg/Kg
- Skin (Rabbit) - Moderate irritant 500 mg/24 hr.
- Eye (Rabbit) - Moderate to severe irritant

DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS:

Fetotoxic and developmental effects have been reported in rats exposed to 1500 ppm/7 hr.

OTHER DATA:

None

Burdick & Jackson**MATERIAL SAFETY DATA SHEET****n-Butyl Acetate****12. ECOLOGICAL INFORMATION**

EC₅₀ pimephales promelas (fathead minnow) 18 mg/l/96 hr.

13. DISPOSAL CONSIDERATIONS**RCRA**

Is the unused product a RCRA hazardous waste if discarded? Yes

If yes, the RCRA ID number is: D001

OTHER DISPOSAL CONSIDERATIONS:

Dispose of material in accordance with all applicable local, state, and federal regulations.

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 RCA classification and the proper disposal method.

14. TRANSPORT INFORMATION

US DOT PROPER SHIPPING NAME:	Butyl Acetate
US DOT HAZARD CLASS:	3, Flammable Liquid
US DOT ID NUMBER:	UN 1123
US DOT PACKING GROUP:	II
NA EMERGENCY RESPONSE GUIDE:	129

For additional information on shipping regulations affecting this material, contact the information number found in Section 1.

15. REGULATORY INFORMATION**TOXIC SUBSTANCES CONTROL ACT (TSCA)**

TSCA INVENTORY STATUS: n-Butyl Acetate is listed on the TSCA inventory.

OTHER TSCA ISSUES: Subject to export notification.

SARA TITLE III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

<u>INGREDIENT NAME</u>	<u>SARA/CERCLA RQ (lb)</u>	<u>SARA EHS TPQ (lb)</u>
No ingredients listed in this section.		

Burdick & Jackson**MATERIAL SAFETY DATA SHEET****n-Butyl Acetate**

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.

SECTION 311 HAZARD CLASS: Immediate. Acute. Fire.

SARA 313 TOXIC CHEMICALS:

The following ingredients are SARA 313 "Toxic Chemicals". CAS numbers and weight percents are found in Section 2.

INGREDIENT NAME**COMMENT**

No ingredients listed in this section.

STATE RIGHT-TO-KNOW

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

INGREDIENT NAME**WEIGHT % COMMENT**

No ingredients listed in this section.

ADDITIONAL REGULATORY INFORMATION:

OSHA Air Contaminant. 29CFR 1910.1000, Table Z-1, Z-1-A

WHMIS CLASSIFICATION (CANADA):

Class B, Division 2

FOREIGN INVENTORY STATUS:

DSL, EINECS

16. OTHER INFORMATION

CURRENT ISSUE DATE: June, 2000

PREVIOUS ISSUE DATE: January, 1996, August, 1997

CHANGES TO MSDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:

Update to ANSI Standard. New header and footer information.

OTHER INFORMATION:

NFPA Classification

Health:	1
Flammability:	3
Reactivity:	0