Powered by

A global vision of prevention

Safety Data Sheet
N-BUTYL ACETATE

1. Identification

Product identifier	N-BUTYL ACETATE		
Product code	SOL-0041		
Other means of identification	None.		
Recommended use of the chemical and restrictions on use	A protective and/or decorative finish or accompanying paint product. Not recommended for any other use not detailed on product data sheet or label.		
Manufacturer	GEMINI INDUSTRIES, INC. 2300 Holloway Drive El Reno, OK 73036 USA Tel. 1-800-262-5710 Fax 1-405-262-9310 www.gemini-coatings.com	**Distributor**	Gemini Industries, Inc. 850 Flint Road Toronto, Ontario Canada M3J 2T7 Tel. 1-800-262-5710
Emergency phone number	24-hour Emergency (Spill, Leak, Exposure or accident) INFOTRAC 800-535-5053 Outside USA, Call Collect 1-352-323-3500 (French & English) HAZMAT Response and MSDS Help: EMI 800-510-8510		

2. Hazard identification

Summary	FLAMMABLE LIQUID! Keep away from heat, sparks and open flame. Avoid contact with skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

WHMIS 2015/OSHA HCS 2012/GHS

Flammable liquids (Category 3)
Specific target organ toxicity, single exposure, Respiratory tract irritation (Category 3)
Specific target organ toxicity, single exposure, Narcotic effects (Category 3)

WARNING

H226: Flammable liquid and vapour
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness
P210: Keep away from heat, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground or bond container and receiving equipment.
P241: Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing mist, vapours and spray.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves, protective clothing, eye protection and/or face protection.
P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340+P312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a

POISON CENTER or physician if you feel unwell.
P370+378: In case of fire: Use the National Fire Protection Association Class B extinguisher to extinguish.
P403+235: Store in a well ventilated place. Keep cool.
P405: Store locked up.
P501: Dispose of contents and container to a licensed chemical disposal agency in accordance with local, regional and national regulations.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Butyl acetate (normal)	123-86-4	90 - 100 %

4. First-aid measures

Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
Skin contact	Wash skin with warm water and mild soap for at least 15 minutes. Remove contaminated clothing and wash before reuse. Avoid touching eyes with contaminated body parts. If a problem develops or persists, seek medical attention.
Eye contact	IMMEDIATELY! Flush with water for at least 15 minutes. Remove contact lenses if easy to do. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If victim is conscious wash out mouth with water and give 1-2 glasses of water to drink. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	May cause slight irritation to eyes. Prolonged or repeated contact may cause defatting dermatitis. May cause central nervous system effects. May cause respiratory tract irritation.
Notes to the physician	Treat symptomatically. If gastric lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemicals, alcohol resistant foam, carbon dioxide (CO2). Do not use a heavy water jet.
Specific hazards arising from the chemical	NFPA: Class IB Flammable liquid. Flammable liquid and vapours. May be ignited by heat, sparks, flame or static electricity. Vapours are heavier than air and may travel to an ignition source distant from the material handling point. Do not apply to hot surfaces.
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Water spray can reduce the intensity of the flames. However, the water jets can spread the fire. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry in sewer and other enclosed area. For a large spill, consult the Department of Environment or the relevant authorities.
Methods and materials for containment and cleaning up	Remove sources of ignition. Ventilate the area well. Stop leak, if it's possible to do so without risk. Make sure you have a fire extinguisher near you. Absorb with inert material (soil, sand, vermiculite) or wipe up or scrape up and place in an appropriate waste disposal container clearly identified. Use non-sparking and antistatic tools. Dispose via a licensed waste disposal contractor. Finish cleaning the contaminated surface by rinsing with soapy water.

7. Handling and storage

Precautions for safe handling	Keep away from heat, sparks and open flame. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Use non-sparking and antistatic tools. Ground/bond all containers when transfering large quantities (5 gallons US or 20 L and more). Use only in well ventilated area. Do not breathe vapours, mists or aerosols. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Keep containers tightly closed when not in use. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove contaminated clothing and wash before reuse.
Conditions for safe storage, including any incompatibilities	Storage and handling should follow the NFPA 30 Flammable and/or Combustible Liquids Code and the National Fire Code of Canada (NFCC). Store tightly closed and in properly labelled container in a dry, cool and well ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from oxidizing materials and incompatible materials (see section 10). Keep away from direct sunlight and heat.
Storage temperature	10 to 25°C (50 to 77°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	N-Butyl acetate: 1700 ppm.			
Butyl acetate (normal)	STEL	200 ppm		ACGIH , ON
		200 ppm	950 mg/m^3	RSST
	TWA (8h)	20 ppm		BC
		150 ppm		ACGIH , ON
		150 ppm	713 mg/m^3	RSST
Appropriate engineering controls	Provide sufficient mechanical ventilation (general or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits. Use an explosion proof mechanical ventilation. Ensure that eyewash stations and safety showers are close to the workstation.			
Individual protection measures				
Eye	If there is a risk of contact with eyes, wear chemical splash goggles. If respiratory hazards exist, a full face respirator may be required instead.			
Hands	Chemical-resistant, impervious gloves should be worn at all times when handling this chemical product. Wear gloves made of unlined Butyl Rubber, nitrile or PVC coated with cotton liner. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear.			

	Gloves must only be worn on clean hands.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. Wear appropriate chemical impervious clothing. If necessary, wear an apron or long-sleeve protective coverall suit.
Respiratory	Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times of exposure limit, wear a half mask respirator with organic vapour cartridges. For an APF until maximum 100 times of exposure limit, wear a full face mask respirator with organic vapour cartridges.
Feet	Wear rubber boots to clean up a spill.

9. Physical and chemical properties

Physical state	Liquid	**Flammability**	Flammable.
Colour	Clear	**Flammability limits**	N/Av.
Odour	Characteristic	**Flash point**	27°C (80.6°F)
Odour threshold	N/Av.	**Auto-ignition temperature**	425°C (797°F)
pH	N/Ap.	**Sensibility to electrostatic charges**	Yes
Melting point	N/Ap.	**Sensibility to sparks and/or friction**	N.Av.
Freezing point	N/Ap.	**Vapour density**	>1 (Air = 1)
Boiling point	126°C (258.8°F)	**Relative density**	0.8827 kg/L (Water = 1)
Solubility	Slightly soluble in water.	**Partition coefficient n-octanol/water**	N/Av.
Evaporation rate	< Butyl Acetate	**Decomposition temperature**	N/Av.
Vapour pressure	1.1 to 1.3kPa (8.3 to 9.8 mm Hg) @ 20°C (68°F)	**Viscosity**	N/Av.
Percent Volatile	100%	**Molecular mass**	116.16

N/Av.: Not Available N/Ap.: Not Applicable Und.: Undetermined N/E: Not Established

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.
Conditions to avoid	Avoid heat, flame and sparks. Avoid contact with incompatible materials.
Incompatible materials	Strong bases, mineral acids, strong oxidizing agents (e.g. chlorine, fluorine, nitric acid, perchloric acid, peroxides, nitrates, chlorates, chromates, permanganates and

	perchlorates).
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Numerical measures of toxicity	Butyl acetate (normal)	Ingestion 10768 mg/kg Rat LD50 Inhalation >32.5 mg/l/4h Rat LC50 Skin >17600 mg/kg Rabbit LD50
Likely routes of exposure	Skin, eyes, inhalation.	
Delayed, immediate and chronic effects	**Eye contact**	May cause slight irritation to eyes. Eye Irritation, Rabbit (Male and Female): Test de Draize entre 2-19, slightly irritating. The first signs of eye irritation in humans occur when the concentration in the air is 300 ppm.
	Skin contact	Skin Irritation/Corrosion, Rabbit, (Male and Female) : Draize method is negative, no irritating. Skin sensitisation, Buehler test, Guinea pig : not sensitizing. Prolonged or repeated exposure can cause skin drying, defatting and dermatitis.
	Inhalation	Overexposure may cause nose, throat and respiratory tract irritation. High concentrations may cause central nervous system depression characterized by headache, dizziness, vertigo, nausea, drowsiness and fatigue. The severity of symptoms may vary depending on exposure conditions.
	Ingestion	Low degree of acute toxicity. May cause gastro-intestinal irritation with nausea and vomiting.
	IARC/NTP Classification	No ingredients listed.
	Carcinogenicity	Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.
	Specific target organ toxicity - single exposure	Central nervous system.
Interactive effects	No information available.	
Other information	No information available.	

12. Ecological information

Ecological toxicity	Fish - Pimephales promelas - Fresh water	LC50 18 mg/L; 96 h (n-Butyl acetate) OECD 203
	Aquatic Invertebrate - Daphnia magna	EC50 44 mg/L; 48 h (n-Butyl acetate)
	Algea - Desmodesmus subspicatus	EC50 674.7 mg/L; 72 h (n-Butyl acetate) OECD 201
Persistence	Not persistent in aquatic environment.	
Degradability	N-Butyl acetate is readily biodegradable (96% in 28 days) OECD Guideline 301D.	
Bioaccumulative potential	N-Butyl acetate has a low potential for bioaccumulation based on estimated bioconcentration factors (BCF) of 15.3 and low partition coefficient (Log Kow 2.3).	
Mobility in soil	Materials is expected to volatilize slowly from water based. n-Butyl acetate will be distributed to air (93.4%), water (5.78%), soil (0.792%), and sediment (<0.1%). The Koc value of n-butyl acetate can be estimated to	

	be 19, suggesting that it is expected to have very high mobility in soil.
Other adverse effects	This chemical does not deplete the ozone layer.

13. Disposal considerations

Container 	Important! Prevent waste generation. Use in full. DO NOT dispose residue in sewers, streams or drinking water supply. DO NOT puncture, cut, heat or burn container, even after use. Paint residues, including lacquers, dyes, shellacs, varnishes, paint solvents and thinners, can be reprocessed where there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

14. Transport information

UN Number	UN 1123
UN Proper Shipping Name	BUTYL ACETATES
Environmental hazards	This material is not listed as a marine pollutant.
Special precautions for user	Permit required for transportation with proper DANGER placards displayed on vehicle.
TDG - Transportation of Dangerous Goods (Canada)	
Transport hazard class(es)	 Class 3
Packing group	II
IMO/IMDG - International Maritime Transport	
Classification	UN 1123. BUTYL ACETATES. Class 3, PG II. Emergency schedules (EmS-No) F-E, S-D
IATA - International Air Transport Association	
Classification	UN 1123. BUTYL ACETATES. Class 3, PG II.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Butyl acetate (normal)	123-86-4	X	X		X

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA							CWA 311	

			CER CLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)		CWA Prio.
Butyl acetate (normal)	123-86-4	X	X						X	

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

No ingredients listed.

Other regulations	
	WHMIS 1988  B2 Class B2 : Flammable Liquid **HMIS**  **NFPA** 

16. Other information

Date (YYYY-MM-DD)	GEMINI INDUSTRIES, INC. 2017-04-05
Version	01
Other information	- The GHS hazards classification in this SDS is from the original SDS provided by the manufacturer. REFERENCES: - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, http://hazmap.nlm.nih.gov/index.php - TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, http://toxnet.nlm.nih.gov/ - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), http://www.reptox.csst.qc.ca - NIOSH Pocket Guide to Chemical Hazards, Centers for Disease Control and Prevention, NIOSH Publications, 2007, http://www.cdc.gov/niosh/npg/npg.html - Butyl Acetate, OECD Existing Chemicals Database, Chemicals Screening Information DataSet (SIDS) for High Volume Chemicals, http://webnet.oecd.org/HPV/UI/Search.aspx - Acétate de n-butyle, Fiche Toxicologique FT31, Institut National de Recherche et de Sécurité, http://www.inrs.fr - IPCS INCHEM, Chemical Safety Information from Intergovernmental Organizations, Canadian Centre for Occupational Health and Safety (CCOHS), Copyright International Programme on Chemical Safety (IPCS), http://www.inchem.org

ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
HMIS: Hazardous Materials Identification System
NFPA: National Fire Protection Association
OSHA: Occupational Safety and Health Administration (USA)
NIOSH: National Institute for Occupational Safety and Health
NTP: National Toxicology Program
RSST: Règlement sur la santé et la sécurité du travail (Québec)
GHS: Globally Harmonized System
IARC: International Agency for Research on Cancer
IDLH: Immediately Dangerous to Life or Health
STEL: Short Term Exposure Limit (15 min)
TWA: Time Weighted Averages
WHMIS: Workplace Hazardous Materials Information System