Safety Data Sheet
BUTYL ACETATE

Version 1.0 Date: 06/01/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : BUTYL ACETATE
Product Use Description : SOLVENT

Manufacturer or supplier's details

Company : Solvents and Petroleum Services, Inc.

Address
1405 Brewerton Rd, Syracuse, NY 13208
800-315-4467
mark@solventsandpetroleum.com

Emergency telephone number:
Transport North America: CHEMTREC 800.424.9300

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Flammable liquids : Category 3

GHS Label element
Hazard pictograms :

Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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.
P280 Wear protective gloves/ 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.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

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.
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.
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.

Emergency Overview

WARNING!	
Appearance	liquid
Colour	Colorless
Odour	sweet, fruit-like odor
Hazard Summary	No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous components

CAS-No.	Chemical Name	Concentration (%)
123-86-4	n-Butyl acetate	90 - 100

Molecular formula : C6-H12-O2

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.
Consult a physician after significant exposure.
If unconscious place in recovery position and seek medical advice.

In case of skin contact : If on skin, rinse well with water.
If on clothes, remove clothes.
Call a physician if irritation develops or persists.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical
Water spray

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Specific extinguishing methods	: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. For safety reasons in case of fire, cans should be stored separately in closed containments.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary. Exposure to decomposition products may be a hazard to health.

NFPA Flammable and Combustible Liquids Classification:
Flammable Liquid Class IC

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. For personal protection see section 8. Smoking, eating and drinking should be prohibited in

the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : No smoking.
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.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
123-86-4	n-Butyl acetate	TWA	150 ppm	ACGIH
		STEL	200 ppm	ACGIH
		ST	200 ppm 950 mg/m3	NIOSH REL
		TWA	150 ppm 710 mg/m3	NIOSH REL
		TWA	150 ppm 710 mg/m3	OSHA Z-1
		TWA	150 ppm 710 mg/m3	OSHA P0
		STEL	200 ppm 950 mg/m3	OSHA P0

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

In the case of vapour formation use a respirator with an approved filter.

Hand protection

Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	:	impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	Colorless
Odour	:	sweet, fruit-like odor
Odour Threshold	:	0.04 ppm
pH	:	6.2 @ 20 °C (68 °F)
Freezing Point (Melting point/range)	:	-74 °C (-101 °F)
Boiling Point (Boiling point/boiling range)	:	125 °C (257 °F)
Flash point	:	27 °C (81 °F)
Evaporation rate	:	1 n-Butyl Acetate
Flammability (solid, gas)	:	No data available
Burning rate	:	No data available
Upper explosion limit	:	7.5 %(V)
Lower explosion limit	:	1.2 %(V)
Vapour pressure	:	15 hPa @ 20 °C (68 °F)
Relative vapour density	:	4.0 @ 20 °C (68 °F)

Relative density	:	0.877 @ 25 °C (77 °F)
Density	:	0.881 g/cm3 @ 20 °C (68 °F)
Bulk density	:	No data available
Solubility(ies)		
Water solubility	:	5.3 g/l slightly soluble @ 20 °C (68 °F)
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	log Pow: 2.3
Auto-ignition temperature	:	407 °C
Thermal decomposition	:	No data available
Viscosity		
Viscosity, dynamic	:	0.73 mPa.s @ 20 °C (68 °F)
Viscosity, kinematic	:	0.83 mm2/s @ 20 °C (68 °F)
Surface tension	:	61.3 mN/m, 20 °C

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	None known. Vapours may form explosive mixture with air. Stable under recommended storage conditions.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	strong bases Strong oxidizing agents strong reducing agents
Hazardous decomposition products	:	carbon dioxide and carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

123-86-4:

Acute oral toxicity	:	LD50 (rat): 10,760 mg/kg Method: OECD Test Guideline 423 GLP: no
Acute inhalation toxicity	:	LC50 (rat, male and female): > 21 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403 GLP: yes
Acute dermal toxicity	:	LD50 (rabbit, male and female): > 14,112 mg/kg Method: OECD Test Guideline 402 GLP: yes

Skin corrosion/irritation

Components:

123-86-4:
Species: rabbit
Classification: Not irritating to skin
Method: OECD Test Guideline 404
Result: Not irritating to skin
GLP: no

Serious eye damage/eye irritation

Components:

123-86-4:
Species: rabbit
Classification: Not irritating to eyes
GLP: yes

Respiratory or skin sensitisation

Components:

123-86-4:
Species: guinea pig
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:
123-86-4:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Test species: Chinese hamster lung fibroblasts Metabolic activation: Without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: No data available
Genotoxicity in vivo	:	Test Type: In vivo micronucleus test Test species: mouse (male and female) Application Route: Oral Dose: 500, 1000, 2000 mg/kg bw Method: OECD Test Guideline 474 Result: negative GLP: yes Test substance: Information given is based on data obtained from similar substances.
Germ cell mutagenicity-Assessment	:	Animal testing did not show any mutagenic effects.

Carcinogenicity

Components:
123-86-4:
Remarks: This information is not available.

Carcinogenicity - Assessment	:	Contains no ingredient listed as a carcinogen

Reproductive toxicity

Components:
123-86-4:

Effects on fertility	:	Species: rat, male and female Application Route: Inhalation Dose: 0, 750, 1500, 2000 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 750 ppm General Toxicity F1: NOAEC: 750 ppm Fertility: NOAEC: 2,000 ppm Early Embryonic Development: NOAEC: 750 ppm Symptoms: Effect on reproduction capacity. Method: OECD Test Guideline 416 GLP: yes

Effects on foetal development	:	Species: rat, male and female Application Route: vapour Dose: 500, 1500, 3000 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 5 days/week Symptoms: Skeletal malformations. Result: Teratogenic effects. GLP: yes
Reproductive toxicity - Assessment	:	No toxicity to reproduction Animal testing did not show any effects on foetal development.

STOT - single exposure

Product:

No data available

Components:

No data available

STOT - repeated exposure

Product:

No data available

Components:

No data available

Repeated dose toxicity

Components:
123-86-4:
Species: rat, male and female
NOAEL: 500
Application Route: inhalation (vapour)
Exposure time: 13 wk
Number of exposures: 6 h/d, 5d/wk
Dose: 500, 1500, 3000 ppm
GLP: yes
Symptoms: oral or nasal discharge

Aspiration toxicity

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

123-86-4:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 18 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203
GLP: no

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 44 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l
End point: Growth rate
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 23 mg/l
Exposure time: 21 d

Toxicity to bacteria : EC 50 (Tetrahymena pyriformis (Ciliate)): 356 mg/l
Exposure time: 40 h
Test Type: Static

Persistence and degradability

Product:

Biodegradability : Test Type: aerobic
Biodegradation: 83 %
Exposure time: 28 d
Remarks: Readily biodegradable, according to appropriate OECD test.

Components:

123-86-4:

Biodegradability	:	Biodegradation: 83 % Exposure time: 28 d Method: OECD Test Guideline 301D
Chemical Oxygen Demand (COD)	:	0.00169 mg/g
BOD/COD	:	BOD/COD: 72 %
Theoritical Oxygen Demand (ThOD)	:	0.0022 mg/g

Bioaccumulative potential

Components:

123-86-4:

Bioaccumulation	:	Species: Fish Bioconcentration factor (BCF): 15
Partition coefficient: n-octanol/water	:	log Pow: 1.82

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Solvents & Petroleum Service, Inc.

Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

IATA (International Air Transport Association): UN1123, BUTYL ACETATES, 3 , III

IMDG (International Maritime Dangerous Goods): UN1123, BUTYL ACETATES, 3, III, Flash Point:27 °C(81 °F)

DOT (Department of Transportation): UN1123, BUTYL ACETATES, 3, III

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable liquid, Moderate skin irritant, Moderate eye irritant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
n-Butyl acetate	123-86-4	5000	5000

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	Fire Hazard Acute Health Hazard Chronic Health Hazard
SARA 302	:	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : 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.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

123-86-4	n-Butyl acetate	100 %

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

123-86-4	n-Butyl acetate	100 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

123-86-4	n-Butyl acetate	100 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

123-86-4	n-Butyl acetate	90 - 100 %

Pennsylvania Right To Know

123-86-4	n-Butyl acetate	90 - 100 %

New Jersey Right To Know

123-86-4	n-Butyl acetate	90 - 100 %

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

The components of this product are reported in the following inventories:

1907/2006 (EU)	:	n (Negative listing) (Not in compliance with the inventory)
Switzerland. New notified substances and declared preparations	:	y (positive listing) (The formulation contains substances listed on the Swiss Inventory)

United States TSCA Inventory	:	y (positive listing) (On TSCA Inventory)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ISHL - Inventory of Chemical Substances (METI)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
China. Inventory of Existing Chemical Substances in China (IECSC)	:	y (positive listing) (On the inventory, or in compliance with the inventory)

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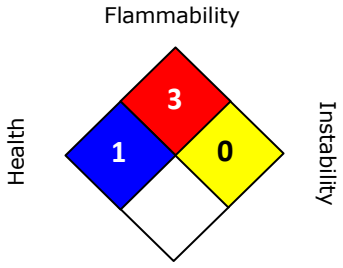
SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 =Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by SPS.

Material number:
16050369, 16049717, 16042518, 104050, 16001714, 788173, 780367, 776833, 710123, 699236, 659494, 604109, 604105, 598680, 554345, 88419, 71288, 71285, 72969, 105750, 89374, 55661, 104047, 105731, 55956, 55973, 105915, 105164, 55040, 72402, 89524, 151195, 148902, 139099, 165363, 503165, 502502, 20227, 20226, 20225

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program

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CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philipines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Compositon, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50		Lethal Concentration 50%	