

# **Design Report of Safety Data Sheet**

Report No.: HGNM22BYS3

Issue date: 2022. 01. 29

Product Name:	N-Butyl Acetate
Applicant:	Taixing Jinjiang Chemical Industry Co., Ltd
Supplier:	Taixing Jinjiang Chemical Industry Co., Ltd
Composition of the product:	N-Butyl Acetate : $\geq$ 99.5%.
Warranty of Design:	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) Ninth revised edition

Design Result of SDS please see next page.

**Designer:** 

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**Auditor:** 

Approver:

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常州合规思远产品安全技术服务有限公司

Changzhou Hegui Siyuan Products Safety Technology Service Co., Ltd.

名称: 常州合规思远产品安全技术服务有限公司(简称:合规化学)

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名称: 常州合规思远产品安全技术服务有限公司(简称:合规化学)

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## **Safety Data Sheet**

## **N-Butyl Acetate**

Version: V2.0.0.2

Report No.: HGNM22BYS3 Creation Date: 2022/01/17 Revision Date: 2022/01/27

\*Prepared according to UN GHS (the 9th revised edition)

#### Product identifier

Product Name	N-Butyl Acetate
CAS No.	123-86-4
EC No.	204-658-1
Molecular Formula	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>

#### Recommended use of the product and restrictions on use

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

### Details of the supplier

Applicant Name	Taixing Jinjiang Chemical Industry Co., Ltd
Applicant Address	No.16 Tongjiang Road, Economy Developing Area, Taixing City, Jiangsu Province, China
Applicant Post Code	225400
Applicant Telephone	0523-87672959
Applicant Fax	0523-87671768
Applicant E-mail	j1yj01@Yipschemical.com
Supplier Name	Taixing Jinjiang Chemical Industry Co., Ltd
Supplier Address	No.16 Tongjiang Road, Economy Developing Area, Taixing City, Jiangsu Province, China
Supplier Post Code	225400
Supplier Telephone	0523-87672959
Supplier Fax	0523-87671768
Supplier E-mail	j1yj01@Yipschemical.com

#### | Emergency phone number

Emergency phone number 0523-87676197

2 Hazard(s) identification

### | Hazard classification according to GHS

Flammable Liquids	Category 3
Specific Target Organ Toxicity (Single Exposure)	

#### GHS Label elements

N-Butyl Acetate	Version: V2.0.0.2 Revision Date: 2022/01/2
Hazard pictograms	<u>*************************************</u>
Signal word	Warning
Hazard statements	
H226	Flammable liquid and vapour
H336	May cause drowsiness or dizziness
11000	way sause drowsmoss of dizziness
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 and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing gas/mist/vapour/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
♦ Response	
P319	Get medical help if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P370+P378	In case of fire: Use appropriate extinguishing media mentioned in Section 5 of the SDS to extinguish.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
<ul><li>Storage</li></ul>	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
<ul><li>Disposal</li></ul>	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard description	
-	zarde
Physical and chemical has	
A 1114-1	Flammable liquids, its vapor and air mixture can form explosive mixture.
<ul> <li>Health hazards</li> </ul>	
Inhalad	Cough Sore throat Dizziness Headache

	Flammable liquids, its vapor and air mixture can form explosive mixture.
<ul> <li>Health hazards</li> </ul>	
Inhaled	Cough. Sore throat. Dizziness. Headache.
Ingestion	Nausea.
Skin Contact	Dry skin.
Eye	Redness. Pain.
Environmental hazards	

## 3 Composition/information on ingredients

#### Substance/mixture

Substance

Component	CAS No.	EC No.	Concentration (wt, %)
N-Butyl Acetate	123-86-4	204-658-1	≥ 99.5

## 4 First-aid measures

#### Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Skin contact	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Ingestion	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.
Inhalation	Fresh air, rest. Refer for medical attention.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

#### Most important symptoms/effects, acute and delayed

1 Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

#### Indication of any immediate medical attention and special treatment needed

- 1 Treat symptomatically.
- 2 Symptoms may be delayed.

## 5 Fire-fighting measures

### Extinguishing media

Suitable extinguishing media	Small Fire: Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam; Large
	Fire: Water spray, fog or alcohol-resistant foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter or spread fire.

#### Specific hazards arising from the substance or mixture

1	Will form explosive mixtures with air.
2	Fire exposed containers may vent contents through pressure relief valves thereby increasing fire intensity and/ or vapour concentration.
3	Vapours may travel to source of ignition and flash back.
4	Liquid and vapour are flammable.
5	Development of hazardous combustion gases or vapor possible in the event of fire.

## | Special protective equipment and precautions for fire-fighters

May expansion or decompose explosively when heated or involved in fire.

1 As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full

	protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

## 6 Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

- 1 Avoid breathing vapours and contacting with skin and eye.
- 2 Beware of vapours accumulating to form explosive concentrations.
- 3 Vapours can accumulate in low areas.
- 4 Emergency personnel wear positive pressure self-contained breathing apparatus. Wear protective and antistatic clothing. Wear chemical impermeable gloves.
- 5 Use personal protective equipment, do not breathe gas/mist/vapour/spray.
- Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
- 7 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

- 1 Prevent further leakage or spillage if safe to do so.
- 2 Discharge into the environment must be avoided.

#### Methods and materials for containment and cleaning up

- It is recommended that emergency personnel wear positive pressure self-contained breathing apparatus and wear anti-static clothing.
- 2 In case of small amount of spillage, use clean non sparking tools to collect absorption materials.
- In case of large amount of spillage, construct cofferdam or dig a hole to collect the spillage. Use foam cover to reduce evaporation. Water spray mist can reduce evaporation, but can not reduce the flammability of the leakage in the restricted space.
- 4 Collect absorbent material using a clean, non-sparking tool.
- 5 Cover with anti-solvent foam to reduce evaporation.
- 6 Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- 7 Water spray reduces evaporation but does not reduce the flammability of spills in confined spaces.
- 8 Cut off the source of the leak as much as possible.
- 9 Keep leaks in a ventilated place.
- Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 11 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
- 12 Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.
- 13 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## 7 Handling and storage

#### Precautions for safe handling

- 1 Avoid inhalation of vapors.
- 2 Use only non-sparking tools.
- 3 To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded.

4	Use explosion proof equipment.
5	Handling is performed in a well ventilated place.
6	Wear suitable protective equipment.
7	Avoid contact with skin and eyes.
8	Keep away from heat/sparks/open flames/ hot surfaces.

#### Conditions for safe storage, including any incompatibilities

- 1 Keep containers tightly closed.
- 2 Keep containers in a dry, cool and well-ventilated place.
- 3 Keep away from heat/sparks/open flames/hot surfaces.
- 4 Store away from incompatible materials and foodstuff containers.

## 8 Exposure controls/personal protection

#### Control parameters

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
N-Butyl Acetate	USA - OSHA	150	710	-	-
	South Korea	150	710	200	950
	Ireland	150	710	200	950
	Germany (AGS)	62	300	124	600
	Denmark	150	710	300	1420
	Australia	150	713	200	950

### Biological limit values

Biological limit values | No relevant regulations

- Monitoring methods
- 1 EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
- 2 GBZ/T 300 series standard Determination of toxic substances in workplace air.

#### Engineering controls

- 1 Ensure adequate ventilation, especially in confined areas.
- 2 Ensure that eyewash stations and safety showers are close to the workstation location.
- 3 Use explosion-proof electrical/ventilating/lighting/equipment.
- 4 Set up emergency exit and necessary risk-elimination area.

#### | Personal protection equipment

General requirement			
Eye protection	Must wear appropriate safety goggles.		
Hand protection	Must wear anti static chemical protective gloves.		
Respiratory protection	Must wear appropriate personal respiratory protective equipment.		

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**Skin and body protection** Must wear anti static chemical protective clothing and anti static shoes.

## Physical and chemical properties and safety characteristics

### | Physical and chemical properties

1 2	
Physical state	Liquid
Colour	Colorless transparent
Odor	No information available
Odor threshold	No information available
рН	No information available
Melting point/freezing point(°C)	-78
Initial boiling point and boiling	126
range(°C)	
Flash point(Closed cup,°C)	27
Evaporation rate	No information available
Flammability	Flammable
Upper/lower explosive	Upper limit: 7.6; Lower limit: 1.2
limits[%(v/v)]	
Vapor pressure	1.2kPa (20°C)
Relative vapour density(Air = 1)	4.0
Relative density(Water=1)	0.88 (20°C)
Solubility	Insoluble in water
n-octanol/water partition	1.82
coefficient	
Auto-ignition temperature(°C)	420
Decomposition temperature(°C)	No information available
Kinematic viscosity	No information available
Particle characteristics	Not applicable

## 10 Stability and reactivity

### | Stability and reactivity

<u>'</u>	
Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	In contact with metal alkoxides may cause a fire.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Metal alkyl oxide, metal hydride, inorganic peroxide, nitrate and halogens oxyacid salts.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 Toxicological information

### **Acute toxicity**

Component	LD₅₀(oral)	LD₅₀(dermal)	LC₅₀(inhalation,4h)

<b>N-Butyl Acetate</b> 10768mg/kg(Rat) > 17600mg/kg(Rabbit) 1.853mg/l	.(Rat)
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#### Carcinogenicity

Component	List of carcinogens by the IARC  Monographs	Report on Carcinogens by NTP
N-Butyl Acetate Not Listed		Not Listed

#### Others

N-Butyl Acetate			
Skin corrosion/irritation	Based on available data, the classification criteria are not met		
Serious eye damage/irritation	Based on available data, the classification criteria are not met		
Skin sensitization	Based on available data, the classification criteria are not met		
Respiratory sensitization	Based on available data, the classification criteria are not met		
Reproductive toxicity	Based on available data, the classification criteria are not met		
STOT-single exposure	May cause drowsiness or dizziness(Category 3)		
STOT-repeated exposure	Based on available data, the classification criteria are not met		
Aspiration hazard	Based on available data, the classification criteria are not met		
Germ cell mutagenicity	Based on available data, the classification criteria are not met		
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met		

## 12 Ecological information

### | Acute aquatic toxicity

Component	Fish	Crustaceans	Algae
N-Butyl Acetate	LC <sub>50</sub> : 81mg/L (96h)(Fish)	No information available	No information available

#### | Chronic aquatic toxicity

Chronic aquatic toxicity No information available

### Persistence and degradability

Persistence and degradability No information available

#### | Bioaccumulative potential

Bioaccumulative potential | No information available

#### Mobility in soil

Mobility in soil No information available

### | Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
N-Butyl Acetate	Not PBT/vPvB

## 13 Disposal considerations

#### Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

# 14 Transport information

### Label and Mark

Transporting Label



## IMDG-CODE

UN number	1123	
UN proper shipping name	BUTYL ACETATES	
Transport hazard class	3	
Transport subsidiary hazard class	None	
Packing group	ш	
Special provisions	223	
Limited quantities	5L	
Excepted quantities	E1	
Marine pollutant (Yes or no)	No	
EmS No.	F-E,S-D	

### IATA-DGR

1123
BUTYLACETATES
3
None
ш
E1
Y344
10 L
355
60 L
366

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Cargo Aircraft Maxium net	220 L
Quantity per Package	
Special provisions	A3
ERG code	3L

#### UN-ADR

0			
UN number	1123		
UN proper shipping name	BUTYLACETATES		
Transport hazard class	3		
Transport subsidiary hazard class			
Packing group	ш		
Special provisions	-		
Limited quantities	5 L		
Excepted quantities	E1		
Packing instructions	P001 IBC03 LP01 R001		
Special packing provisions	-		
Mixed packing provisions	MP19		
Protable tanks and bulk containers instructions	T2		
Protable tanks and bulk containers special provisions	TP1		
ADR tank code	LGBF		
ADR tank special provisions	-		
Vehicle for tank carriage	FL		
Transport category(Tunnel restriction code)	3 (D/E)		
Special provisions for carriage(Packages)	V12		
Special provisions for carriage (Bulk)	-		
Special provisions for carriage (Loading, unloading and handling)	-		
Special provisions for carriage (Operation)	S2		
Hazard identification No.	30		
Notes	-		

## 15 Regulatory information

### | International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AIIC	ENCS
N-Butyl Acetate	√	√	√	√	√	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	√

[EINECS] European Inventory of Existing Commercial Chemical Substances

[TSCA] United States Toxic Substances Control Act Inventory

[DSL] Canadian Domestic Substances List

[IECSC] China Inventory of Existing Chemical Substances

[NZIoC] New Zealand Inventory of Chemicals

[PICCS] Philippines Inventory of Chemicals and Chemical Substances

[KECI] Korea Existing Chemicals Inventory

[AIIC] Australia. Inventory of Industrial Chemicals (AIIC)
[ENCS] Japan Inventory of Existing & New Chemical Substances

Note:

" $\sqrt{\phantom{a}}$ " Indicates that the substance included in the regulations.

"x" No data or not inlouded in the regulations.

## 16 Other information

#### Information on revision

Creation Date	2022/01/17
Revision Date	2022/01/27
Reason for revision	-

#### Reference

- [1] IPCS: The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home.
- [2] IARC, website: http://www.iarc.fr/。
- [3] OECD: The Global Portal to Information on Chemical Substances, website: https://www.echemportal.org/echemportal/substancesearch/index.action。
- [4] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple.
- [5] NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
- [6] EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/。
- [7] U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg。
- [8] Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/。

#### Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG	International Maritime Dangerous Goods
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
$LC_{50}$	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD <sub>50</sub>	Lethal Dose 50%	NTP	National Toxicology Program
EC <sub>50</sub>	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
$EC_X$	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
Pow	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor		

#### Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 9th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.