

SAFETY DATA SHEET**Ethylene glycol monobutyl****ether(EB\BCS);BUTYL GLYCOL (BG)****SDS**

JIANGSU DYNAMIC CHEMICAL CO., LTD.

- According to GHS (Eighth Revised Edition)

Section 1 Product and Company Identification**> Product Identifier**

Product Name	Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG)
Synonyms	-
CAS No.	111-76-2
EC No.	203-905-0
Molecular Formula	C ₆ H ₁₄ O ₂

> Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses	Please consult manufacturer.
Uses Advised Against	Please consult manufacturer.

> Details of the Supplier of the Safety Data Sheet

Applicant Name	JIANGSU DYNAMIC CHEMICAL CO., LTD.
Application Address	NO.2, BAILONG ROAD, NANJING CHEMICAL INDUSTRY PARK, CHINA
Applicant Post Code	210047
Applicant Telephone	+86-25-57098560
Applicant Fax	+86-25-58392527
Applicant E-mail	WR@CHINATIANYIN.COM
Supplier Name	JIANGSU DYNAMIC CHEMICAL CO., LTD.
Supplier Address	NO.2, BAILONG ROAD, NANJING CHEMICAL INDUSTRY PARK, CHINA
Supplier Post Code	210047
Supplier Telephone	+86-25-57098560
Supplier Fax	+86-25-58392527
Supplier E-mail	WR@CHINATIANYIN.COM

> Emergency Phone Number

Emergency Phone Number	+86-25-57098565
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Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the eighth revised edition):

> GHS Hazard Class

Flammable Liquids	Category 4
Acute Toxicity – Oral	Category 4
Acute Toxicity – Dermal	Category 3
Skin Corrosion/Irritation	Category 2
Eye Damage/Irritation	Category 2A
Acute Toxicity – Inhalation	Category 4

> GHS Label Elements

Pictogram



Signal Word

Danger**> Hazard Statements**

H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled

> Precautionary Statements**Prevention**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P312	Call a POISON CENTER/doctor, if you feel unwell.
P321	Specific treatment (see first aid measures on this label).
P330	Rinse mouth.
P301+P312	IF SWALLOWED: Call a POISON CENTER/ doctor,if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use dry chemical, carbon dioxide or alcohol-resistant foam to extinguish.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

P403	Store in a well-ventilated place.
P405	Store locked up.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 Composition/Information on Ingredients

Component	Concentration (weight percent, %)	CAS No.	EC No.
Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG)	≥ 99	111-76-2	203-905-0

Section 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	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
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 and Effects, both 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.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable Extinguishing Media	Dry chemical, carbon dioxide 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 May emit poisonous fumes on fire.
- 2 Containers may explode when heated.
- 3 Fire exposed containers may vent contents through pressure relief valves.
- 4 May expansion or decompose explosively when heated or involved in fire.

> Advice for Firefighters

- 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.

Section 6 Accidental Release Measure**> Personal Precautions, Protective Equipment and Emergency Procedures**

- 1 Ensure adequate ventilation. Remove all sources of ignition.
- 2 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
- 3 Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

> 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

- 1 Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 2 Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- 3 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section 7 Handling and Storage**> Precautions for Handling**

- 1 Handling is performed in a well ventilated place.
- 2 Wear suitable protective equipment.
- 3 Avoid contact with skin and eyes.
- 4 Keep away from heat/sparks/open flames/ hot surfaces.
- 5 Take precautionary measures against static discharges.

> Precautions for Storage

- 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.

Section 8 Exposure Controls/Personal Protection**> Control Parameters****Occupational Exposure Limit Values**

Component	Country/Region	Limit Value - Eight Hours		Limit Value - Short Term	
		ppm	mg/m ³	ppm	mg/m ³

Ethylene glycol monobutyl ether(EB\BCS); BUTYL GLYCOL (BG) 111-76-2	USA - OSHA	50	240	-	-
	South Korea	20	97	-	-
	Ireland	20	98	50	246
	Germany (AGS)	10	49	40	196
	Denmark	20	98	40	196
	Australia	20	96.9	50	242

Biological Limit Values

No information available

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 160 Determination of toxic substances in workplace air(Series effective standard)and GBZ/T 300 Determination of toxic substances in workplace air(Series standard).

> 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

- Eye Protection** Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).
- Hand Protection** Wear protective gloves (such as butyl rubber) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.
- Respiratory protection** If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
- Skin and Body Protection** Wear fire/flare resistant/retardant clothing and antistatic boots.

Section 9 Physical and Chemical Properties**Appearance:** Colorless transparent liquid**Odor:** No information available**Odor Threshold:** No information available**pH:** No information available**Melting Point/Freezing Point (°C):** -75**Initial Boiling Point and Boiling Range (°C):** 171**Flash Point (°C)(Closed Cup):** 63.2**Evaporation Rate:** No information available**Flammability:** Not applicable**Upper/lower explosive limits[%(v/v)]:** Upper limit: 12.7; Lower limit: 1.1**Vapor Pressure (KPa):** 0.1**Relative Vapour Density(Air = 1):** 4.1**Relative Density(Water=1):** 0.9**Solubility:** Miscible with water**n-Octanol/Water Partition Coefficient:** 0.830**Auto-Ignition Temperature(°C):** 238**Decomposition Temperature (°C):** No information available**Kinematic Viscosity (mm²/s):** No information available**Particle characteristics:** Not applicable**Section 10 Stability and Reactivity****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	No information available
Conditions to Avoid	Incompatible materials, heat, flame and spark.
Incompatible Materials	No information available
Hazardous Decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological Information

> Acute Toxicity

Component	CAS No.	LD ₅₀ (Oral)	LD ₅₀ (Dermal)	LC ₅₀ (Inhalation, 4h)
Ethylene glycol monobutyl ether(EB\BCS); BUTYL GLYCOL (BG)	111-76-2	470mg/kg(Rat)	220mg/kg(Rabbit)	2.175mg/L(Rat)

> Skin Corrosion/Irritation

Causes skin irritation(Category 2)(Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG))

> Serious Eye Damage/Irritation

Causes serious eye irritation(Category 2A)(Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG))

> Skin Sensitization

No information available

> Respiratory Sensitization

No information available

> Germ Cell Mutagenicity

No information available

> Carcinogenicity

ID	CAS No.	Component	IARC	NTP
1	111-76-2	Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG)	Category 3	Not Listed

> Reproductive Toxicity

No information available

> Reproductive Toxicity (Additional)

No information available

> STOT-Single Exposure

No information available

> STOT-Repeated Exposure

No information available

> Aspiration Hazard

No information available

Section 12 Ecological Information**> Acute Aquatic Toxicity**

Component	CAS No.	Fish	Crustaceans	Algae
Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG)	111-76-2	LC ₅₀ : 1370mg/L (96h)(Fish)	EC ₅₀ : >1000mg/L (48h)	ErC ₅₀ : >1000mg/L (72h)

> Chronic Aquatic Toxicity

Component	CAS No.	Fish	Crustaceans	Algae
Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG)	111-76-2	No information available	NOEC: >100mg/L	NOEC: 130mg/L

> Others

Persistence and Degradability
Bioaccumulative Potential

No information available

No information available

Mobility in Soil

No information available

Results of PBT and vPvB Assessment

Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG) does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

Section 13 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 Disposal Recommendations

Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible. Refer to section 13.1 and 13.2.

Section 14 Transport Information

Transporting Label



Marine pollutant	None
UN Number	2810
UN Proper Shipping Name	TOXIC LIQUID, ORGANIC, N.O.S.
Transport Hazard Class	6.1
Transport Subsidiary Hazard Class	NONE
Packing Group	III

Section 15 Regulatory Information

> International Chemical Inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Ethylene glycol monobutyl ether(EB\BCS);BUTYL GLYCOL (BG)	√	√	√	√	√	√	√	√	√

【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】 Existing and Evaluated Chemical Substances.

【AICS】 Australia Inventory of Chemical Substances.

【ENCS】 Existing And New Chemical Substances.

Note

“√” Indicates that the substance included in the regulations

“×” That no data or included in the regulations

Section 16 Additional Information

Creation Date	2020/05/31
Revision Date	2020/05/31
Reason for Revision	-

> Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 8th 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.



南京海关危险货物与包装检测中心
国家化学品分类鉴别与评估重点实验室

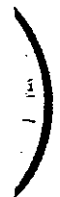


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报告书使用约定

1. 本报告审核结论仅对附件 SDS 负责，如申请单位对提交的 SDS 有任何变更，本报告自动失效。
2. 依据出具报告的需要，本中心要求委托人提供真实、完整的信息和资料。
3. 申请单位对所提供的 SDS 内容的真实性负责，本中心不承担因申请单位提供错误信息导致的任何后果。
4. 本报告经授权签字人签字并加盖本中心印章后生效。
5. 本中心保证本报告的客观公正性，对委托单位的商业信息、技术文件等商业秘密履行保密义务。
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南京海关危险货物与包装检测中心
国家化学品分类鉴别与评估重点实验室



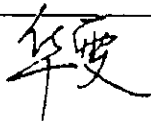
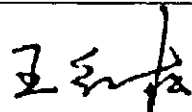
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GHS 标签审核报告

Report of GHS Label Evaluation



样品名称	乙二醇丁醚		
申请单位	江苏德纳化学股份有限公司		
GHS 标签来源	申请单位提供		
审核依据	联合国《全球化学品统一分类和标签制度》(GHS) 第八修订版		
GHS 标签	见本报告附件		
审核结论	申请单位所提交的 GHS 标签 <u>符合</u> 联合国《全球化学品统一分类和标签制度》(GHS) 第八修订版的相关要求。		
审核		签发	

注：申请单位所提交标签已由本中心审核确认（盖中心骑缝章为准），并作为本报告附件。

本报告有效期至 2021 年 05 月 30 日。

——报告结束——

