According to Regulation (EC) No. 1907/2006, Annex II, Amended by REGULATION (EU) No 453/2010,

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Butoxy propanol

Identification of the substance and of the company/undertaking 1.1 Product identifier: Identification on the label/Trade name: **Butoxy propanol** Additional identification: Propylene Glycol butyl Ether see section 3 Identification of the product: Index Number: Not available REACH registration No.: Not available 1.2 Relevant identified uses of the substance and uses advised against: 1.2.1 Identified uses: Used for coatings, inks, photosensitive plastic and so on. 1.2.2 Uses advised against: Not available. 1.3 Details of the supplier of the safety data sheet: Supplier(Only representative): Supplier(Manufacturer): Jiangsu Hualun Chemical Industry Co., Ltd. Address: No.39 Renmin Middle Road, Dinghuo Town, Jiangdu District, Yangzhou City, Jiangsu Provice, China Contact person(E-mail): yzhl@hualunchem.com Telephone: +86-514-86507985 Fax: +86-514-86501755 1.4 Emergency telephone Number: +86-532-83889090

2 Hazards Identification

2.1 Classification of the substance

Available outside office hours?

2.1.1 Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008:

YES

Χ

NO

REGULATION (EC) No 1272/2008			
Hazard classes/Hazard categories	Hazard statement		
Flam. Liq. 3	H226		
STOT SE 3	H336		

For full text of H- phrases: see section 2.2.

67/548/EEC		
Hazards characteristics	R-Phrases	

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-	R10
-	R67

For full text of R- phrases: see section 16.

2.1.2 The most important adverse effects

2.1.2.1 The most important adverse physicochemical effects:

Flammable liquid and vapour.

2.1.2.2 The most important adverse human health effects:

May cause drowsiness or dizziness.

2.1.2.3 The most important adverse environmental effects:

Not applicable.

2.2 label elements

Hazard Pictograms:





Signal Word(S): Warning

Hazard Statement: H226: Flammable liquid and vapour

H336: May cause drowsiness or dizziness

Precautionary Statement: P210: Keep away from heat/sparks/open flames/hot surfaces. — 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.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P370 + P378: In case of fire: Use ... for extinction.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

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P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

P501:Dispose of contents/container to ...

2.3 Other hazards

Not available (PBT,vPvB, Substance is an endocrine disruptor etc.)

3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	Registration No.	Index No.	CAS No.	EC No.	Concentration	Classification according to EU CLP 1272/2008
1-butoxy-2-propanol	N/A	N/A	5131-66-8	225-878-4	> 70.0	Flam. Liq. 3; H226 STOT SE 3; H336
2-butoxy-1-propanol	N/A	N/A	15821-83-7	249-598-7	< 30.0	Flam. Liq. 3; H226
Chemical Name	Registration No.	Index No.	CAS No.	EC No.	Concentration	Classification according to 67/548/EEC
1-ethoxypropan-2-ol	N/A	N/A	5131-66-8	225-878-4	> 70.0	R10 R67
2-ethoxypropanol	N/A	N/A	15821-83-7	249-598-7	< 30.0	R10

4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Remove the source of contamination or move victim to fresh air. Keep respiratory tract smooth. If breathe hard, administer oxygen by a trained person.

4.1.2 In case of skin contact:

Immediately take off the all contaminated clothing, wash skin with soap and flush with large amounts of water. If irritation continues, get medical attention. Wash contaminated clothing before reuse.

4.1.3 In case of eyes contact:

Immediately flush eyes with plenty of water or normal saline for at least 15 minutes. Get medical attention.

4.1.4 In case of ingestion:

If large quantity swallowed, give lukewarm water if victim completely conscious/alert. Do not induce vomiting. Risk of

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damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs, get medical advice/attention.

5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Sand, dry chemical, carbon dioxide.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Flammable.

5.3 Advice for fire-fighters:

Clear fire area of all the non-emergency personal. Firefighters should wear full fire-fighting turn-out gear (full Bunker gear) including self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.

6.2 Environmental Precautions:

Do not allow material to be released to the environment without proper governmental permits

6.3 Methods for Containment and Cleaning up:

Small Spills: Absorb with earth, sand or other non-combustible material, collect and seal in properly labeled containers for later disposal.

Large Spills: Clear spill area of all non-emergency personnel. Dike and contain spill. Prevent entry into sewers, waterways. Remove with vacuum trucks or pump to specific container, collect and deliver to the authorized agent in the local area for disposal.

6.4 Reference to other sections:

According to Regulation (EC) No. 1907/2006, Annex II, Amended by REGULATION (EU) No 453/2010,

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See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.5 Additional information:

Don't use a brush or compressed air for cleaning surfaces or clothing.

Clear spills immediately.

7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Store only in tightly closed, properly vented containers away from heat, sparks, open flame, acids and strong oxidizing agents. Use non-sparking type tools and equipment, including explosion proof ventilation. Storage areas should be equipped with emergency spill handling equipment and suitable host material.

7.3 Specific end use(s):

Not applicable.

8 Exposure control/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: TWAs: 100 ppm (TWA)

150 ppm (STEL) (CAS# 5131-668)

- 8.1.2 Additional exposure limits under the conditions of use: Not available.
- 8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls

8.2.1Appropriate engineering controls:

Keep atmosphere be dry, and provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection Wear chemical goggles and face shield.

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Hand protection Wear chemical resistant gloves such as: Neoprene.

Body protection Wear anti-static clothing, which sufficient to prevent all skin contact, such as coveralls and long

sleeves. Wear anti-static clothing.

Respiratory protection
If the exposure limit is exceeded, a full-face organic vapor respirator may be worn for up to ten

times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances

where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied

respirator.

Thermal hazards Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: liquid

Colour: Colorless

Odour: Slight ethereal odor

Odour threshold:

PH:

Not available

Melting point/range (°C):

Not available

Boiling point/range (°C): 162-175°C/101.325kpa

Flash point (°C):

Evaporation rate:

Not available

Flammability (solid, gas);

Ignition temperature (°C):

Upper/lower flammability/explosive limits:

Vapour pressure:

Not available

Not available

Not available

Not available

Relative Density (25°C):

Bulk density (kg/m³):

Water solubility (g/l) at 20°C : 0.875-0.895(20°C)

n-Octanol/Water (log Po/w):

Auto-ignition temperature:

Decomposition temperature:

Viscosity, dynamic (mPa s):

Explosive properties:

Not available

Not available

Not available

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Oxidising properties: Not available

Not available

Not available

9.2. Other information:

Fat solubility(solvent- oil to be specified) etc: Not available

Surface tension:

Dissociation constant in water(pKa):

Not available

Oxidation-reduction Potential:

Not available

Specific gravity: 0.875~ 0.895 @ 20 °C

10 Stability and reactivity

10.1 Reactivity:

The substance is stable under normal storage and handling conditions.

10.2 Chemical stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

10.3 Possibility of hazardous reactions:

No dangerous reactions known.

10.4 Conditions to avoid:

Incompatible materials. Heat, flames, ignition sources.

10.5 Incompatible materials:

Strong oxidizers, strong acids, strong bases, aluminum, and copper.

10.6 Hazardous decomposition products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

11 Toxicological information

11.1 Toxicokinetics, metabolism and distribution

Non-human toxikological data: Not available

11.2 Information on toxicological effects

Acute toxicity:

LD50(Oral, Rat): 5660 Ul/Kg
LD50(Dermal Rabbit): 3100 Mg/Kg
LC50(Inhalation, Rat): Not available

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Skin corrosion/Irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: May cause drowsiness or dizziness.

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

12 Ecological information

Toxicity:

Acute t	toxicity	Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability: This material may biodegrade to a moderate extent.

Bioaccumulative potential:Not availableMobility in soil:Not available.Results of PBT&vPvB assessment:Not available

Other adverse effects: Do not empty into drains.

13 Disposal considerations

13.1 Waste treatment methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

13.2 Product / Packaging disposal:

If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

14 Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)	
UN-Number:	N-Number: 3271		3271	
UN Proper shipping name:	ETHERS, N.O.S.	ETHERS, N.O.S.	ETHERS, N.O.S.	

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		10101011 110	1101101011 44101 10/01/2010	
Transport hazard Class:	3	3	3	
Packaging group:	III	III	III	
Environmental hazards:	NO	NO	NO	
Special precautions for user:	See section 2.2	See section 2.2	See section 2.2	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	IBC03	IBC03	IBC03	
15 Regulation information				

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant information regarding authorization:Not applicable.Relevant information regarding restriction:Not applicable.

Other EU regulations: Employment restrictions concerning young person must

be observed. For use only by technically qualified

individuals.

Other National regulations: Not applicable

Chemical Safety Assessment has been carried out?

YES

NO X

16 Other information

16.1 Indication of changes Version 1.1 Amended by EU No 453/2010

16.2 Relevant R- phrases (number and full text):

R10 Flammable.

R67 Vapours may cause drowsiness and dizziness.

16.3 Training instructions:

Not applicable.

16.4 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.5 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or

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in combination with any other product or process, is the responsibility of the user.