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SECTION 1. IDENTIFICATION

Product name

: Glycol Ether DB

Manufacturer or supplier's of Company name of supplier		
Address	:	9595 Six Pines Dr., Ste 8210 The Woodlands, TX 77380 info@thecemicalsupply (832) 706-4045
Emergency telephone	:	CHEMTREC: +1-800-424-9300,
Recommended use of the c Recommended use	hen :	nical and restrictions on use Solvent
Restrictions on use	:	None known.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200		
Eye irritation	:	Category 2A
GHS label elements Hazard pictograms	:	
Signal Word	:	Warning
Hazard Statements	:	H319 Causes serious eye irritation.
Precautionary Statements	:	Prevention: P264 Wash skin thoroughly after handling. P280 Wear eye protection/ face protection.
		Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ atten- tion.



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Other hazards

Forms peroxides of unknown stability.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
diethylene glycol monobutyl ether	112-34-5	100

SECTION 4. FIRST AID MEASURES

If inhaled	:	Remove to fresh air. Treat symptomatically. If symptoms persist, call a physician.
In case of skin contact	:	Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical advice/ attention.
If swallowed	:	Seek medical advice.
Most important symptoms and effects, both acute and delayed	:	Causes serious eye irritation.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Alcohol-resistant foam Water spray Dry chemical Carbon dioxide (CO2)
Unsuitable extinguishing media	:	None known.
Specific hazards during fire fighting	:	Forms peroxides of unknown stability.
Hazardous combustion prod- ucts	:	No hazardous combustion products are known
Further information	:	None known.
Special protective equipment for fire-fighters	:	Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.



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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Wear appropriate personal protective equipment. Treat recovered material as described in the section "Disposal considerations".
Environmental precautions	:	Avoid release to the environment.
Methods and materials for containment and cleaning up	:	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Wash thoroughly after handling.
Conditions for safe storage	:	Keep container tightly closed.
Materials to avoid	:	Keep container tightly closed.
Further information on stor- age stability	:	Store away from other materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
diethylene glycol monobutyl ether	112-34-5	TWA (Inhal- able fraction and vapor)	10 ppm	ACGIH

Engineering measures : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Respiratory protection	 If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. For high airborne concentrations, use an approved supplied-
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			air respirator. Supplied air respirators with an escape bottle may be
Eye pro	tection	:	Wear safety glasses with side shields (or goggles).
Protecti	ive measures	:	Ensure that eye flushing systems and safety showers are located close to the working place.
Hygiene	e measures	:	Handle in accordance with good industrial hygiene and safety practice.
ECTION 9	PHYSICAL AND CHE	EMIC	CAL PROPERTIES
Appeara	ance	:	liquid
Color		:	colorless
Odor		:	very faint
Odor Tr	nreshold	:	not determined
рН		:	not determined
Melting	point/freezing point	:	-90 °F / -68 °C
Boiling	point/boiling range	:	446.7 °F / 230.4 °C
Flash p	oint	:	237 °F / 114 °C
Evapora	ation rate	:	not determined
Flamma	ability (solid, gas)	:	Not applicable
Self-ign	ition	:	410 °F / 210 °C
	explosion limit / Upper bility limit	:	24.6 %(V)
	explosion limit / Lower bility limit	:	0.7 %(V)
Vapor p	pressure	:	2.9 Pa (77 °F / 25 °C)
Relative	vapor density	:	5.6
Relative	edensity	:	0.955 (68 °F / 20 °C)
Solubilit Wat	ty(ies) er solubility	:	0.955 g/l (68 °F / 20 °C)



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Partition coefficient: n- octanol/water	: log Pow: 1 (68 °F / 20 °C)
Autoignition temperature	: not determined
Decomposition temperature	: not determined
Viscosity Viscosity, dynamic	: 6 mPa.s (68 °F / 20 °C)
Viscosity, kinematic	: 6.28 mm2/s (68 °F / 20 °C)
Explosive properties	: Not classified
Oxidizing properties	: Not classified
Surface tension	: 69 mN/m, 68 °F / 20 °C
Molecular weight	: 162.2 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	None reasonably foreseeable.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	Forms peroxides of unknown stability. Stable
Conditions to avoid	:	Incompatible materials
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	Carbon dioxide (CO2) Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity Not classified based on available information.

Product:		
Acute oral toxicity	:	LD50 Oral (Rat): 4,500 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 29 ppm Exposure time: 2 h
Acute dermal toxicity	:	LD50 Dermal (Rabbit): 2,764 mg/kg



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Components:

diethylene glycol monobutyl ether:

Acute oral toxicity	:	LD50 Oral (Rat): 4,500 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 29 ppm Exposure time: 2 h
Acute dermal toxicity	:	LD50 Dermal (Rabbit): 2,764 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Species	:	Rabbit
Exposure time	:	4 h
Result	:	slight

Components:

diethylene glycol monobutyl ether:

Species	:	Rabbit
Exposure time	:	4 h
Result	:	slight

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Species	:	Rabbit
Result	:	slight
Exposure time	:	24 h

Components:

diethylene glycol monobutyl ether:

Species	:	Rabbit
Result	:	slight
Exposure time	:	24 h

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Test Type	:	Skin Sensitization
Species	:	Guinea pig
Result	:	non-sensitizing



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Components:

diethylene glycol monobuty	l et	her:
Test Type	:	Skin Sensitization
Species	:	Guinea pig
Result	:	non-sensitizing

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro	:	Test Type: Mutagenicity - Bacterial Metabolic activation: +/- activation Result: negative
		Test Type: Mutagenicity - Mammalian Metabolic activation: +/- activation Result: negative
Genotoxicity in vivo	:	Species: Mouse Application Route: oral: gavage Result: negative

Components:

diethylene glycol monobutyl ether:

Genotoxicity in vitro	:	Test Type: Mutagenicity - Bacterial Metabolic activation: +/- activation Result: negative
		Test Type: Mutagenicity - Mammalian Metabolic activation: +/- activation Result: negative
Genotoxicity in vivo	:	Species: Mouse Application Route: oral: gavage Result: negative

Carcinogenicity

Not classified based on available information.

- **IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.



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•	roductive toxicity classified based on avail	ble information
<u>Proc</u> Effec	<u>luct:</u> ets on fertility	: Remarks: No data available
	T-single exposure	
	classified based on avail	ble information.
Proc		
Rem	arks	: No data available
	T-repeated exposure classified based on avail	able information.
Proc	luct:	
Rem		: No data available
Rep	eated dose toxicity	
Proc	luct:	
Spec		: Rat
NOA		: 250 mg/kg
	ication Route osure time	: Ingestion : 90 d
Spec		: Rat
NOA		: > 2,000 mg/kg
	ication Route osure time	: Dermal Study : 90 d
Rem		: (highest dose tested)
Spec		: Rat
NOA		: > 0.094 mg/l
	ication Route osure time	: Inhalation study: : 90 d
<u>Com</u>	iponents:	
diet	nylene glycol monobut	/l ether:
Spec		: Rat
NOA	EL	: 250 mg/kg
	ication Route osure time	: Ingestion : 90 d
Spec		: Rat
NOA		: > 2,000 mg/kg
	ication Route osure time	: Dermal Study : 90 d
Rem		: (highest dose tested)
Spec	cies	: Rat
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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

diethylene glycol monobutyl ether:

Toxicity to fish	:	LC50 (Fish): 1,300 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): >= 100 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Chlorella pyrenoidosa): > 100 mg/l Exposure time: 96 h

Persistence and degradability

Components:

diethylene glycol monobutyl ether:				
Biodegradability	:	Result: Readily biodegradable. Biodegradation: 85 % Exposure time: 28 d Method: Ready Biodegradability: Modified MITI Test (I)		
Biochemical Oxygen De- mand (BOD)	:	BOD-5: 250 mg/g		
Chemical Oxygen Demand	:	2,080 mg/g		



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(CC	DD)	
	accumulative potentia data available	I
	bility in soil data available	
	er adverse effects data available	
SECTIO	N 13. DISPOSAL CONS	BIDERATIONS
Dis	posal methods	
Wa	ste from residues	: Dispose of as hazardous waste in compliance with local and national regulations.
SECTIO	N 14. TRANSPORT INF	ORMATION
Inte	ernational Regulations	
	A-DGR regulated as a dangerou	us good
)G-Code regulated as a dangerou	us good
Tra	nsport in bulk according	ng to Annex II of MARPOL 73/78 and the IBC Code
Pro	duct name	: POLY(2-8)ALKYLENE GLYCOL MONOALKYL(C1- C6)ETHER
	lution category p type	: Z : 3
Dor	mestic regulation	
	CFR regulated as a dangerou	us good
SECTIO		

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)
SARA 311/312 Hazards	: Serious eye damage	e or eye irritation



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5	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.
	California Prop. 65	
	his product does not contain a pirth, or any other reproductive	any chemicals known to the State of California to cause cancer, defects.
٦	The ingredients of this produ	ict are reported in the following inventories:
Г	ICSI	: On the inventory, or in compliance with the inventory
Г	ISCA	: All substances listed as active on the TSCA inventory
A	AICS	: On the inventory, or in compliance with the inventory
C	DSL	: All components of this product are on the Canadian DSL
E	ENCS	: On the inventory, or in compliance with the inventory
l	SHL	: On the inventory, or in compliance with the inventory
٢	KECI	: On the inventory, or in compliance with the inventory
F	PICCS	: On the inventory, or in compliance with the inventory
I	ECSC	: On the inventory, or in compliance with the inventory
٢	NZIOC	: On the inventory, or in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information



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> HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

Special hazard

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	:	8-hour, time-weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance



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Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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