



SAFETY DATA SHEET

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture Bug- Off

Registration number -

Synonyms None.

Product Code 1078

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Tar and Bug Remover

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Malco Products, Inc.
Address 361 Fairview Ave
Barberton, OH 44203
US

Division

Telephone Phone 800-253-2526
Fax 330-777-8317

e-mail msdsinfo@malcopro.com

Contact person Not available.

1.4. Emergency telephone number Phone 1-800-424-9300

DISTRIBUTOR IN NEW ZEALAND:

Pacer - Car Clean Products NZ Ltd
33 Ha Crescent, Wiri, Auckland 2104
New Zealand
Phone: 09 25000 91
Email: sales@pacer.co.nz
Website: www.pacer.co.nz

24hr Emergency Assistance in New Zealand:

National Poison Control Center:
0800 Poison [764 766]

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Serious eye damage/eye irritation Category 2 H319 - Causes serious eye irritation.

Hazard Summary (according to Dangerous Substances Directive)

Physical hazards Not classified for physical hazards.

Health hazards Not classified for health hazards.

Environmental hazards Not classified for hazards to the environment.

Specific hazards None known.

Main symptoms Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms



Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

Prevention

P264 Wash 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.

Storage

Not available.

Disposal

Not available.

Supplemental label information

1,25% of the mixture consists of component(s) of unknown acute dermal toxicity. 11,25% of the mixture consists of component(s) of unknown acute inhalation toxicity. 11,25% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 11,25% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	10 - < 20	112-34-5 203-961-6	-	603-096-00-8	#
Classification: Eye Irrit. 2;H319					
sodium carbonate	< 1	497-19-8 207-838-8	-	011-005-00-2	
Classification: Acute Tox. 3;H331;(ATE: 0,8 mg/l), Skin Corr. 1B;H314, Eye Irrit. 2;H319					
ammonia%	< 0,2	1336-21-6 215-647-6	-	007-001-01-2	
Classification: Skin Corr. 1B;H314, Eye Dam. 1;H318, Aquatic Acute 1;H400					
Other components below reportable levels	80 - < 90				B

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

4.3. Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards

No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media

Alcohol resistant foam. Powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
For emergency responders	Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	MAK	67,5 mg/m3
	STEL	10 ppm
		101,2 mg/m3
		15 ppm

Belgium. Exposure Limit Values

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m3
	TWA	15 ppm
		67,5 mg/m3
		10 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m3
		15 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
	TWA	67,5 mg/m ³ 10 ppm

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	MAC	67,5 mg/m ³ 10 ppm
	STEL	101,2 mg/m ³ 15 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	Ceiling	100 mg/m ³	
	TWA	70 mg/m ³	
sodium carbonate (CAS 497-19-8)	Ceiling	10 mg/m ³	Aerosol, inhalable.
	TWA	5 mg/m ³	Aerosol, inhalable.

Denmark. Exposure Limit Values

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	TLV	68 mg/m ³ 10 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	TWA	67,5 mg/m ³ 10 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	TWA	68 mg/m ³ 10 ppm
	STEL	36 mg/m ³ 50 ppm
TWA		14 mg/m ³ 20 ppm

France. OELs. Indicative Occupational Exposure Limits as Prescribed by Order of 30 June 2004, as amended

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	VLE	101,2 mg/m ³ 15 ppm
		VME

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	VLE	101,2 mg/m3
	Regulatory status: Regulatory indicative (VRI)	15 ppm
	Regulatory status: Regulatory indicative (VRI)	68 mg/m3
	VME	10 ppm
Regulatory status: Regulatory indicative (VRI)		

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	TWA	67 mg/m3	Vapor and aerosol.
		10 ppm	Vapor and aerosol.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	AGW	67 mg/m3	Vapor and aerosol.
		10 ppm	Vapor and aerosol.

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m3
		15 ppm
	TWA	67,5 mg/m3
		10 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m3
	TWA	67,5 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m3
		15 ppm
	TWA	67,5 mg/m3
		10 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m3
		12 ppm
	TWA	67,5 mg/m3
		10 ppm

Italy. Occupational Exposure Limits

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm
		67,5 mg/m ³ 10 ppm

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm
		67,5 mg/m ³ 10 ppm

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm
		67,5 mg/m ³ 10 ppm

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm
		67,5 mg/m ³ 10 ppm

Netherlands. OELs (binding)

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	100 mg/m ³
	TWA	50 mg/m ³

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	TLV	68 mg/m ³
	TWA	10 ppm

Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	100 mg/m ³
	TWA	0 ppm

Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value
	TWA	67 mg/m ³
		0 ppm

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
		15 ppm
	TWA	67,5 mg/m ³
		10 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
		15 ppm
	TWA	67,5 mg/m ³
		10 ppm
sodium carbonate (CAS 497-19-8)	STEL	3 mg/m ³
	TWA	1 mg/m ³

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
		15 ppm
	TWA	67,5 mg/m ³
		10 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	TWA	67,5 mg/m ³
		10 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m ³
		15 ppm
	TWA	67,5 mg/m ³
		10 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	Ceiling	101 mg/m ³
		15 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
	TWA	68 mg/m3 10 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101 mg/m3	Vapor and aerosol.
		15 ppm	Vapor and aerosol.
	TWA	67 mg/m3 10 ppm	Vapor and aerosol. Vapor and aerosol.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m3
		15 ppm
	TWA	67,5 mg/m3 10 ppm

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Components	Type	Value
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)	STEL	101,2 mg/m3
		15 ppm
	TWA	67,5 mg/m3 10 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines

Netherlands OELs (binding): Skin designation

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5) Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation 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. Provide eyewash station.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

- Hand protection Wear appropriate chemical resistant gloves.

- Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Not available.
Melting point/freezing point	Not available.
Boiling point or initial boiling point and boiling range	Not available.
Flammability	Not applicable.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	10,8 - 11
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	Not available.
Vapor pressure	Not available.
Density and/or relative density	
Density	8,40 lb/gal
Vapor density	Not available.
Particle characteristics	Not available.

9.2. Other information

9.2.1. Information with regard to physical hazard classes No relevant additional information available.

9.2.2. Other safety characteristics

Specific gravity	1,01
VOC	10,09 % estimated

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidizing agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

11.1. Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)		
Acute		
Dermal		
LD50	Rabbit	2700 mg/kg
Oral		
LD50	Rat	4500 mg/kg
sodium carbonate (CAS 497-19-8)		
Acute		
Inhalation		
LC50	-	800 mg/m ³ , 2 Hours
Oral		
LD50	Rat	4090 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.	
Skin sensitization	Due to partial or complete lack of data the classification is not possible.	
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.	
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.	
Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)		
Not listed.		
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.	
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.	
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.	
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.	
Mixture versus substance information	No information available.	
11.2. Information on other hazards		
Endocrine disrupting properties	This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.	
Other information	Not available.	

SECTION 12: Ecological information

12.1. Toxicity Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

Components	Species	Test Results
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) 1300 mg/l, 96 hours
ammonia% (CAS 1336-21-6)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) 15 mg/l, 96 hours
sodium carbonate (CAS 497-19-8)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (<i>Ceriodaphnia dubia</i>) >= 156,6 - <= 298,9 mg/l, 48 hours
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) 300 mg/l, 96 hours

12.2. Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

**Partition coefficient
n-octanol/water (log Kow)**
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether 0,56

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

**12.5. Results of PBT and vPvB
assessment** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

**12.6. Endocrine disrupting
properties** This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

12.7. Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number Not regulated as dangerous goods.

**14.2. UN proper shipping
name** Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk Not assigned.

Hazard No. (ADR) Not assigned.

Tunnel restriction code Not assigned.

14.4. Packing group Not assigned.

14.5. Environmental hazards No.

**14.6. Special precautions for
user** Not assigned.

RID

14.1. UN number Not regulated as dangerous goods.

**14.2. UN proper shipping
name** Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk Not assigned.

14.4. Packing group Not assigned.

14.5. Environmental hazards No.

**14.6. Special precautions for
user** Not assigned.

ADN

14.1. UN number Not regulated as dangerous goods.

**14.2. UN proper shipping
name** Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk Not assigned.

14.4. Packing group Not assigned.

14.5. Environmental hazards No.

**14.6. Special precautions for
user** Not assigned.

IATA

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk Not assigned.

14.4. Packing group Not assigned.

14.5. Environmental hazards No.

14.6. Special precautions for user Not assigned.

IMDG

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk Not assigned.

14.4. Packing group Not assigned.

14.5. Environmental hazards

Marine pollutant No.

EmS Not assigned.

14.6. Special precautions for user Not assigned.

14.7. Maritime transport in bulk according to IMO instruments Not established.

NEW ZEALAND:

Cleaning Products (Subsidiary Hazard) Group Standard 2020 HSR002530

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (CAS 112-34-5)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ammonia% (CAS 1336-21-6)

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended. Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MAC: Maximum Allowed Concentration.
MARPOL: International Convention for the Prevention of Pollution from Ships.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TLV: Threshold Limit Value.
TWA: Time Weighted Average.
VLE: Exposure Limit Value.
VME: Exposure Average Value.
vPvB: Very persistent and very bioaccumulative.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements, which are not written out in full under sections 2 to 15

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H400 Very toxic to aquatic life.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.

Training information

Follow training instructions when handling this material.

Disclaimer

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