



SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture Xtrax Carpet & Upholstery Cleaner (Aerosol)

Registration number -

Synonyms None.

Product Code 124720

Issue date 09-17-2015

Version number 07

Revision date 04-14-2016

Supersedes date 09-17-2015

Distributor in New Zealand

Pacer Car Clean Products NZ LTD
 33 Ha Crescent Wiri
 Auckland, New Zealand
 Telephone: +64 9 25000 91
 Fax: +64 9 25000 92
 Web: :www.pacer.co.nz

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

Identified uses Carpet Cleaner

Uses advised against None known.

24hr Emergency Assistance in New Zealand
 National Poison Control Center: 0800 Poison [764 766]

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

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

Physical hazards		
Aerosols	Category 1	H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated.
Health hazards		
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.

Hazard summary CONTENTS UNDER PRESSURE.
 Aerosol. Pressurized container may explode when exposed to heat or flame. Causes serious eye irritation. Occupational exposure to the substance or mixture may cause adverse health effects.

Hazard Summary (according to Dangerous Substances Directive)

Physical hazards Extremely flammable.

Health hazards May cause cancer. May cause heritable genetic damage. Irritating to eyes.

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

Contains: N-butane



Hazard pictograms

Signal word Danger

Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurized container: May burst if heated.
H319 Causes serious eye irritation.

Precautionary statements

Prevention

P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
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.
P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

Not available.

Supplemental label information None.

2.3. Other hazards None known.

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	1 - < 3	112-34-5 203-961-6	-	603-096-00-8	#
Classification:	Eye Irrit. 2;H319				
N-butane	1 - < 3	106-97-8 203-448-7	-	601-004-01-8	
Classification:	Flam. Gas 1;H220				

Other components below reportable levels 90 - 100

List of abbreviations and symbols that may be used above

M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
#: This substance has been assigned Community workplace exposure limit(s).

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 In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.

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 Extremely flammable aerosol.

5.1. Extinguishing media
Suitable extinguishing media Water fog. Foam. Dry chemical 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 Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters
Special protective equipment for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Special fire fighting procedures Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
For emergency responders Keep unnecessary personnel away. 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 Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Cover with plastic sheet to prevent spreading. 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.

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 Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid contact with eyes. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s) Not available.

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 (CAS 112-34-5)	MAK	97,5 mg/m ³
	STEL	10 ppm 101,2 mg/m ³ 15 ppm
N-butane (CAS 106-97-8)	Ceiling	3800 mg/m ³ 1600 ppm
	MAK	1900 mg/m ³ 800 ppm
Propane (CAS 74-98-6)	Ceiling	3600 mg/m ³ 2000 ppm
	MAK	1800 mg/m ³ 1000 ppm

Belgium. Exposure Limit Values

Components	Type	Value
N-butane (CAS 106-97-8)	TWA	1000 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm

Belgium. Exposure Limit Values.

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 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 (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 10 ppm
N-butane (CAS 106-97-8)	TWA	1800 mg/m ³
Propane (CAS 74-98-6)	TWA	1800 mg/m ³

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 (CAS 112-34-5)	MAC	67,5 mg/m ³
	STEL	10 ppm 101,2 mg/m ³ 15 ppm
N-butane (CAS 106-97-8)	MAC	1450 mg/m ³
	STEL	10 ppm 1810 mg/m ³ 750 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	Ceiling	100 mg/m ³
	TWA	70 mg/m ³

Denmark. Exposure Limit Values

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	TLV	68 mg/m ³
		10 ppm
N-butane (CAS 106-97-8)	TLV	1200 mg/m ³ 500 ppm
Propane (CAS 74-98-6)	TLV	1800 mg/m ³ 1000 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	TWA	67,5 mg/m ³
N-butane (CAS 106-97-8)	TWA	10 ppm
		1500 mg/m ³ 800 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	TWA	68 mg/m ³
N-butane (CAS 106-97-8)	STEL	10 ppm
		2400 mg/m ³ 1000 ppm
Propane (CAS 74-98-6)	TWA	1900 mg/m ³ 800 ppm
		STEL
	TWA	1500 mg/m ³ 800 ppm

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

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	VLE	101,2 mg/m ³
	VME	15 ppm 67,5 mg/m ³ 10 ppm
N-butane (CAS 106-97-8)	VME	1900 mg/m ³ 800 ppm

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 (CAS 112-34-5)	TWA	67 mg/m ³	Vapor and aerosol.
		10 ppm	Vapor and aerosol.
N-butane (CAS 106-97-8)	TWA	2400 mg/m ³ 1000 ppm	
		1800 mg/m ³ 1000 ppm	

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

Components	Type	Value	Form
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	AGW	67 mg/m ³	Vapor and aerosol.
		10 ppm	Vapor and aerosol.
N-butane (CAS 106-97-8)	AGW	2400 mg/m ³ 1000 ppm	
		1800 mg/m ³ 1000 ppm	

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

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 10 ppm
N-butane (CAS 106-97-8)	TWA	2350 mg/m ³ 1000 ppm
		1800 mg/m ³ 1000 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces		
Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	67,5 mg/m ³
N-butane (CAS 106-97-8)	STEL	9400 mg/m ³
	TWA	2350 mg/m ³
Iceland. OELs. Regulation 154/1999 on occupational exposure limits		
Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 10 ppm
N-butane (CAS 106-97-8)	TWA	1200 mg/m ³ 500 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm
Ireland. Occupational Exposure Limits		
Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 10 ppm
N-butane (CAS 106-97-8)	TWA	1000 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm
Italy. Occupational Exposure Limits		
Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 10 ppm
N-butane (CAS 106-97-8)	STEL	1000 ppm
Latvia. OELs. Occupational exposure limit values of chemical substances in work environment		
Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 10 ppm
N-butane (CAS 106-97-8)	TWA	300 mg/m ³
Lithuania. OELs. Limit Values for Chemical Substances, General Requirements		
Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	200 mg/m ³
	TWA	30 ppm 100 mg/m ³ 15 ppm
Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A		
Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 10 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 (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 (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 (CAS 112-34-5)	TLV	68 mg/m ³
N-butane (CAS 106-97-8)	TLV	10 ppm
		600 mg/m ³
Propane (CAS 74-98-6)	TLV	250 ppm
		900 mg/m ³ 500 ppm

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	100 mg/m ³
	TWA	67 mg/m ³
N-butane (CAS 106-97-8)	STEL	3000 mg/m ³
	TWA	1900 mg/m ³
Propane (CAS 74-98-6)	TWA	1800 mg/m ³

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

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³ 10 ppm

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

Components	Type	Value
Propane (CAS 74-98-6)	TWA	2500 ppm

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

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	250 mg/m ³
	TWA	150 mg/m ³
Propane (CAS 74-98-6)	STEL	1800 mg/m ³
	TWA	1000 ppm 1400 mg/m ³ 778 ppm

Slovakia. OELs for carcinogens and mutagens. Regulation No. 46/2002 on carcinogenic and mutagenic substances

Components	Type	Value
N-butane (CAS 106-97-8)	TWA	2400 mg/m ³
		1000 ppm

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

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
	TWA	15 ppm 67,5 mg/m ³

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

Components	Type	Value
		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 (CAS 112-34-5)	TWA	67,5 mg/m ³
		10 ppm
N-butane (CAS 106-97-8)	TWA	2400 mg/m ³
		1000 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³
		1000 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
		15 ppm
	TWA	67,5 mg/m ³
		10 ppm

Sweden. Occupational Exposure Limit Values

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	200 mg/m ³
		30 ppm
	TWA	100 mg/m ³
		15 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101 mg/m ³
		15 ppm
	TWA	67 mg/m ³
		10 ppm
N-butane (CAS 106-97-8)	STEL	7200 mg/m ³
		3200 ppm
	TWA	1900 mg/m ³
		800 ppm
Propane (CAS 74-98-6)	STEL	7200 mg/m ³
		4000 ppm
	TWA	1800 mg/m ³
		1000 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
		15 ppm
	TWA	67,5 mg/m ³
		10 ppm
N-butane (CAS 106-97-8)	STEL	1810 mg/m ³
		750 ppm
	TWA	1450 mg/m ³
		600 ppm

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

Components	Type	Value
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	STEL	101,2 mg/m ³
		15 ppm
	TWA	67,5 mg/m ³
		10 ppm

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

Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no-effect level (DNEL)	Not available.
Predicted no effect concentrations (PNECs)	Not available.
8.2. Exposure controls	
Appropriate engineering controls	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. 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. Suitable gloves can be recommended by the glove supplier.
- 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	When using do not smoke. 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	Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Form	Aerosol. Compressed liquefied gas.
Color	Colourless to light yellow.
Odor	Characteristic Xtrax
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	-155,9 °F (-104,4 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Vapor pressure	55 - 75 psig@70F estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Solubility (other)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

9.2. Other information

Specific gravity	0,97 estimated
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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

Components	Species	Test Results
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	2700 mg/kg
Oral		
LD50	Guinea pig	2000 mg/kg
	Mouse	2400 mg/kg
	Rabbit	2200 mg/kg
	Rat	4500 mg/kg
N-butane (CAS 106-97-8)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.
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	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not available.
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.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)		
Aquatic		
Fish	LC50 Bluegill (<i>Lepomis macrochirus</i>)	1300 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient

n-octanol/water (log Kow)

2-(2-Butoxyethoxy)ethanol 0,56

N-butane 2,89

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT Not available.

and vPvB assessment

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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. Do not re-use empty containers.

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. Contents under pressure. Do not puncture, incinerate or crush. 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 UN1950

14.2. UN proper shipping name AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

Class 2.1

Subsidiary risk -

Label(s) 2.1

Hazard No. (ADR) Not available.

Tunnel restriction code D

14.4. Packing group Not applicable.

14.5. Environmental hazards No.

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number UN1950

14.2. UN proper shipping name AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

Class 2.1

Subsidiary risk -

Label(s) 2.1

- 14.4. Packing group Not applicable.
- 14.5. Environmental hazards No.
- 14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

ADN

- 14.1. UN number UN1950
- 14.2. UN proper shipping name AEROSOLS, FLAMMABLE
- 14.3. Transport hazard class(es)
 - Class 2.1
 - Subsidiary risk -
- 14.4. Packing group Not applicable.
- 14.5. Environmental hazards No.
- 14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

- 14.1. UN number UN1950
- 14.2. UN proper shipping name Aerosols, flammable
- 14.3. Transport hazard class(es)
 - Class 2.1
 - Subsidiary risk -
- 14.4. Packing group Not applicable.
- 14.5. Environmental hazards No.
- ERG Code 10L
- 14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
- Other information
 - Passenger and cargo aircraft Allowed.
 - Cargo aircraft only Allowed.

IMDG

- 14.1. UN number UN1950
- 14.2. UN proper shipping name AEROSOLS, FLAMMABLE
- 14.3. Transport hazard class(es)
 - Class 2.1
 - Subsidiary risk -
- 14.4. Packing group Not applicable.
- 14.5. Environmental hazards
 - Marine pollutant No.
- EmS Not available.
- 14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

ADN; ADR; IATA; IMDG; RID



The HSNO Approval Number for this Group Standard is: HSR002518

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 (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended
 Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended
 Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended
 Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended
 Not listed.

Regulation (EC) No. 689/2008 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

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended
 N-butane (CAS 106-97-8)

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended
 N-butane (CAS 106-97-8)

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
 2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)
 N-butane (CAS 106-97-8)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances
 N-butane (CAS 106-97-8)

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended
 2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)
 N-butane (CAS 106-97-8)

Directive 94/33/EC on the protection of young people at work, as amended
 N-butane (CAS 106-97-8)

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. Pregnant women should not work with the product, if there is the least risk of exposure. 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. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

Not available.

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 H-statements not written out in full under Sections 2 to 15

H220 Extremely flammable gas.
 H319 Causes serious eye irritation.

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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