



according to Regulation (EC) No 1907/2006

MultiEx 3D-A9

Revision date: 04.06.2019

Product code: 091610-RM

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

1.1. Product identifier

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

1.3. Details of the supplier of the safety data sheet						
Company name:	kolb Clear	kolb Cleaning Technology GmbH				
Street:	Karl-Arnold-Str. 12					
Place:	D-47877 \	D-47877 Willich				
Telephone:	+49-2154	-947938	Telefax:+49-2154-947947			
e-mail:	info@kolb	p-ct.com				
Contact person:	Herr Linke	er	Telephone: +49-2324-97980			
e-mail:	christian.li	inker@kolb-ct.com				
Internet:	www.kolb-	-ct.com				
Responsible Department:	Labor/ QS					
1.4. Emergency telephone	+49/ (0) 2	3 24/ 979817 (EU)				
number:	+61 4 19 8	809 805 (Australia)				
	+1 970 44	3 9233 (USA)				
	Schweiz:	145				
Further Information						
Australia:		USA:				
kolb Cleaning Technology AP PTY LTD		kolb USA LLC				
6/150 Canterbury Road		410 Sunset, Unit C				
NSW 2200 Bankstown		80501 Longmont – CO				
Phone: +61 2 97900273		Phone 001- 970-532-5100				
Mobile +61 4 19 809 805		Mobile: 001- 970-443-9233				

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Serious eye damage/eye irritation: Eye Irrit. 2 Hazard Statements: Causes serious eye irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Pictograms: Warning



Hazard statements

H319

Causes serious eye irritation.

Precautionary statements

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



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2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

, , Sum formula:

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Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	GHS Classification	•	•			
112-34-5	2-(2-butoxyethoxy)ethanol; diethyl	ene glycol monobutyl ethe	r	> 10 %		
	203-961-6	603-096-00-8				
	Eye Irrit. 2; H319					
	Phosphonobutantricarbonacid-am	ine salt		< 10 %		
	Eye Irrit. 2A; H319					
34590-94-8	Dipropylene glycol monomethyl et	her, Isomerengem		1-5%		
	252-104-2		01-2119450011-60			
111109-77-4	dipropylene			1 - < 5 %		
			01-0000015420-83			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Medical examination necessary even merely on suspicion of intoxication.

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. Remove contaminated, saturated clothing immediately. Wash thoroughly the body (shower or bath). After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician in any case!

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

Gastric perforation

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

Treat symptomatically.



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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Dry extinguishing powder, Foam, Carbon dioxide (CO2), Extinguishing powder

5.2. Special hazards arising from the substance or mixture

Non-flammable. Carbon dioxide (CO2), Burning produces heavy smoke., Carbon monoxide

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Special danger of slipping by leaking/spilling product. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Cover drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Prevent spread over a wide area (e.g. by containment or oil barriers). Retain contaminated washing water and dispose it.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle and open container with care. Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep/Store only in original container.

Hints on joint storage

No special measures are necessary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



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Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
34590-94-8	(2-Methoxymethylethoxy)-I-propanol	50	308		TWA (8 h)	
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	
		15	101.2		STEL (15 min)	

8.2. Exposure controls

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Personal protection equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

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Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour: Odour:	Liquid transparent neutral	
pH-Value (at 20 °C):		10,4
Changes in the physical state		
Melting point:		not determined
Initial boiling point and boiling range:		> 100 °C
Flash point:		(9.2) °C
Flammability Solid: Gas:		not applicable not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Auto-ignition temperature Solid: Gas: Decomposition temperature: Vapour pressure:		not applicable not applicable not determined not determined



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Density (at 20 °C):	1,02 g/cm³	
Solubility in other solvents not determined		
Partition coefficient:	not determined	
Viscosity / dynamic: (at 20 °C)	28 mPa·s	
Vapour density:	not determined	
Evaporation rate:	not determined	
9.2. Other information		
Solid content:	not determined	

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

Chemical stability

10.3. Possibility of hazardous reactions

May cause strong formation of hydrogen by contact with amphoteric metals (e.g. aluminia, lead, zinc) - danger of explosion.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name	Chemical name					
	Exposure route	Dose		Species	Source	Method	
112-34-5	2-(2-butoxyethoxy)ethand	ol; diethylene g	glycol mono	butyl ether			
	oral	LD50 mg/kg	5660	Rat			
	dermal	LD50 mg/kg	4120	Rabbit			
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem						
	oral	LD50 mg/kg	5130	Ratte			
	dermal	LD50 14000 mg/kg	13000- J	Kanincheb			
111109-77-4	dipropylene						
	oral	LD50 mg/kg	3300	Ratte			
	dermal		>2000	kaninchen			

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].



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SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
112-34-5	2-(2-butoxyethoxy)ethance	l; diethylene	e glycol mono	butyl eth	er		
	Acute algae toxicity	ErC50 mg/l	> 100		Scenedesmus sp.		
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna		
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem						
	Acute fish toxicity	LC50 mg/l	>10000	96 h	Pimephales promelas (Amerikan. Elritze)		
	Acute algae toxicity	ErC50 mg/l	>969	96 h	Alge		
	Acute crustacea toxicity	EC50 mg/l	1919	48 h	Daphnia magna (Wasserfloh)		
	Crustacea toxicity	NOEC	12 mg/l		Daphnia magna (Wasserfloh)		
111109-77-4	dipropylene						
	Acute fish toxicity	LC50 mg/l	>100	96 h			
	Acute crustacea toxicity	EC50 mg/l	>100	48 h			

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name					
	Method	Value	d	Source		
	Evaluation					
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem					
	OECD 301E	>70%	28			
	biologisch abbaubar					
111109-77-4	dipropylene					
	Zahn-Wellens-Test (Methode C.9)	25%	28			
	schwer biologisch abbaubar					

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0,56 (25°C)
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem	-0,6
111109-77-4	dipropylene	0,42

BCF

CAS No	Chemical name	BCF	Species	Source
111109-77-4	dipropylene	4		

12.4. Mobility in soil

The product has not been tested.



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12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

Lanu transport (ADR/RID)	
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
Inland waterways transport (ADN)	
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
Air transport (ICAO-TI/IATA-DGR)	
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.5. Environmental hazards	
ENVIRONMENTALLY HAZARDOUS:	no
14.6. Special precautions for user No information available.	
447 Tuesday of in built according to Annay	I of Mound I and the IDC Code

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information	
Restrictions on use (REACH, annex X\	/II):
Entry 55: 2-(2-butoxyethoxy)ethanc	ol; diethylene glycol monobutyl ether
2010/75/EU (VOC):	4,8 % (48,96 g/l)
2004/42/EC (VOC):	43,3 % (441,66 g/l)
Additional information	
To follow: 850/2004/EC, 79/117/EE	C, 689/2008/EC
National regulatory information	
Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D):	1 - slightly water contaminating



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15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

H319 Causes serious eye irritation.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)