

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MultiEx Rapid

Revision date: 19.12.2018

Product code: 090632-CN25

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

1.1. Product identifier

MultiEx Rapid

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

Use of the substance/mixture

Electronics cleaner for spray and immersion plants

1.3. Details of the supplier of the safety data sheet

Company name:	kolb Cleaning Technology GmbH	
Street:	Karl-Arnold-Str. 12	
Place:	D-47877 Willich	
Telephone:	+49-2154-947938	Telefax: +49-2154-947947
e-mail:	info@kolb-ct.com	
Contact person:	Herr Linker	Telephone: +49-2324-97980
e-mail:	christian.linker@kolb-ct.com	
Internet:	www.kolb-ct.com	
Responsible Department:	Labor/ QS	

1.4. Emergency telephone number:

+49/ (0) 23 24/ 979817 (EU)
+61 4 19 809 805 (Australia)
+1 970 443 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:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

May cause respiratory irritation.

Causes serious eye irritation.

Causes skin irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H335	May cause respiratory irritation.
H319	Causes serious eye irritation.

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H315 Causes skin irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 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.

Additional advice on labelling

UFI: J580-80C2-0000-PXHU

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Cleaner on the basis of (according to EC Detergents Regulation 648/2004): anionic surfactants (Corrosion inhibitor); glycols, alkalis, defoamers

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem			10 - < 15 %
	252-104-2		01-2119450011-60	
141-43-5	2-aminoethanol, ethanolamine			5-< 10 %
	205-483-3	603-030-00-8		
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B; H332 H312 H302 H314			
111-76-2	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether			1-< 5 %
	203-905-0	603-014-00-0		
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2; H332 H312 H302 H319 H315			
1310-58-3	caustic potash, potassium hydroxide			0,5-< 1 %
	215-181-3	019-002-00-8		
	Acute Tox. 4, Skin Corr. 1A; H302 H314			

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

Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. 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

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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.

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

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

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. 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

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Requirements for storage rooms and vessels

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

Advice on storage compatibility

No special measures are necessary.

7.3. Specific end use(s)

Electronics cleaner for spray and immersion plants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
34590-94-8	(2-methoxymethylethoxy) propanol	50	308		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
141-43-5	2-Aminoethanol	1	2.5		TWA (8 h)	WEL
		3	7.6		STEL (15 min)	WEL
111-76-2	2-Butoxyethanol	25	123		TWA (8 h)	WEL
		50	246		STEL (15 min)	WEL
1310-58-3	Potassium hydroxide	-	-		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
111-76-2	2-Butoxyethanol	butoxyacetic acid	240 mmol/mol	urine	Post shift

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. wear hand gloves material: nitril or pvc

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.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	transparent
Odour:	neutral
pH-Value (at 20 °C):	11,0

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	100 °C
Flash point:	not measurable

Flammability

Solid:	not applicable
Gas:	not applicable

Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not determined
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Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density (at 20 °C):	1,016 g/cm ³
Water solubility:	easily soluble

Solubility in other solvents

not determined

Partition coefficient:	not determined
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Viscosity / kinematic: (at 40 °C)	21 mm ² /s
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Vapour density:	not determined
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Evaporation rate:	not determined
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9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity

10.2. Chemical stability

Chemical stability

10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Peroxides, Oxidising agent. May cause strong formation of hydrogen by contact with amphoteric metals (e.g. alumina, lead, zinc) - danger of explosion.

10.4. Conditions to avoid

none

10.5. Incompatible materials

Keep away from: Acid, Oxidising agent, Peroxides.

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10.6. Hazardous decomposition products

not known

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem				
	oral	LD50 mg/kg	5130	Ratte	
	dermal	LD50 mg/kg	13000- 14000	Kanincheb	
141-43-5	2-aminoethanol, ethanolamine				
	oral	LD50 mg/kg	1515	Rat	
	dermal	LD50 mg/kg	1025	Rabbit	IUCLID
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		
111-76-2	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether				
	oral	LD50 mg/kg	470	Rat	
	dermal	ATE mg/kg	1100		
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		
1310-58-3	caustic potash, potassium hydroxide				
	oral	LD50 mg/kg	273	Rat	RTECS

Irritation and corrosivity

Causes serious eye irritation.

Causes skin irritation.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (2-aminoethanol, ethanolamine)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

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

SECTION 12: Ecological information

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12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem					
	Acute fish toxicity	LC50 >10000 mg/l	96 h	Pimephales promelas (Amerikan. Elritze)		
	Acute algae toxicity	ErC50 >969 mg/l	96 h	Alge		
	Acute crustacea toxicity	EC50 1919 mg/l	48 h	Daphnia magna (Wasserfloh)		
	Crustacea toxicity	NOEC 12 mg/l		Daphnia magna (Wasserfloh)		
141-43-5	2-aminoethanol, ethanolamine					
	Acute fish toxicity	LC50 150 mg/l	96 h	Onchorhynchus mykiss	IUCLID	
	Acute algae toxicity	ErC50 22 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 65 mg/l	48 h	Daphnia magna		
111-76-2	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether					
	Acute fish toxicity	LC50 1490 mg/l	96 h	Lepomis macrochirus		
1310-58-3	caustic potash, potassium hydroxide					
	Acute fish toxicity	LC50 80 mg/l	96 h	Gambusia affinis	IUCLID	

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				

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem	-0,6
141-43-5	2-aminoethanol, ethanolamine	-1,91 (25°C)
111-76-2	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether	0,81 (25°C)

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. 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

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land 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.

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

2004/42/EC (VOC): 9,8 % (99,568 g/l)

Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC
Regulation (EC) No. 648/2004 (Detergents regulation)

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): 2 - clearly water contaminating

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

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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%

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory 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.)