

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MultiEx VR-SP CN

Revision date: 30.03.2017

Product code: 090678-CN

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

1.1. Product identifier

MultiEx VR-SP CN

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 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/ 988 12 85 (EU)
+61 4 19 809 805 (Australia)
+1 970 443 9233 (USA)

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:
Causes serious eye irritation.
Causes skin irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

1-aminopropan-2-ol, isopropanolamine

Signal word: Warning

Pictograms:



Hazard statements

H319 Causes serious eye irritation.
H315 Causes skin irritation.

Precautionary statements

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

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P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P390 Absorb spillage to prevent material damage.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

, , , ,

Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|---|--------------|----------|----------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | |
| 78-96-6 | 1-aminopropan-2-ol, isopropanolamine | | | < 10 % |
| | 201-162-7 | 603-082-00-1 | | |
| | Skin Corr. 1B; H314 | | | |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether | | | < 10 % |
| | 203-961-6 | 603-096-00-8 | | |
| | Eye Irrit. 2; H319 | | | |
| 34590-94-8 | Dipropylene glycol monomethyl ether, Isomerengem | | | 5-15 % |
| | 252-104-2 | | | |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

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.

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

No information available.

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.

Unsuitable extinguishing media

Strong water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

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

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

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or 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.

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

No special measures are necessary.

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.

Advice on storage compatibility

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/m ³ | fib/cm ³ | Category | Origin |
|------------|------------------------------------|-----|-------------------|---------------------|---------------|--------|
| 34590-94-8 | (2-Methoxymethylethoxy)-l-propanol | 50 | 308 | | TWA (8 h) | |
| | | - | - | | STEL (15 min) | |
| 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.

Eye/face protection

Wear eye protection/face protection.

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.

, 0,5 µ, 4 h

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: liquid
Colour: transparent

pH-Value (at 20 °C): 11,2 @ 50g/ 1 l Water

Changes in the physical state

Melting point: -5 °C
Initial boiling point and boiling range: 100 °C
Flash point: [9.2] °C

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

Test method

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Oxidizing properties

Not oxidising.

Vapour pressure:

not determined

Density (at 20 °C):

0,996 g/cm³ ASTM D 1298

Solubility in other solvents

not determined

Partition coefficient:

not determined

Viscosity / kinematic:
(at 20 °C)23 mm²/s DIN 51562

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

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

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| CAS No | Chemical name | | | | |
|------------|--|----------------------------|-----------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 78-96-6 | 1-aminopropan-2-ol, isopropanolamine | | | | |
| | oral | LD50 2700 mg/kg | Rat | | |
| | dermal | LD50 1600 mg/kg | Rabbit | | |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether | | | | |
| | oral | LD50 5660 mg/kg | Rat | | |
| | dermal | LD50 4120 mg/kg | Rabbit | | |
| 34590-94-8 | Dipropylene glycol monomethyl ether, Isomerengem | | | | |
| | oral | LD50 5130 mg/kg | Ratte | | |
| | dermal | LD50 13000- 14000 mg/kg | Kanincheb | | |

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

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

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

12.1. Toxicity

The product is not: Ecotoxic.

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| CAS No | Chemical name | | | | | |
|------------|--|------------------------|-----------|--|--------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 78-96-6 | 1-aminopropan-2-ol, isopropanolamine | | | | | |
| | Acute fish toxicity | LC50 220 - 460 mg/l | 96 h | Leuciscus idus | IUCLID | |
| | Acute algae toxicity | ErC50 23 mg/l | 72 h | Desmodesmus subspicatus | IUCLID | |
| | Acute crustacea toxicity | EC50 108,8 mg/l | 48 h | Daphnia | IUCLID | |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether | | | | | |
| | Acute algae toxicity | ErC50 > 100 mg/l | | Scenedesmus sp. | | |
| | Acute crustacea toxicity | EC50 > 100 mg/l | 48 h | Daphnia magna | | |
| 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) | | |

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 |
|------------|--|-------------|
| 78-96-6 | 1-aminopropan-2-ol, isopropanolamine | -0,96 |
| 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 |

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

Avoid release to the environment.

SECTION 13: Disposal considerations

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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)

- 14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

- 14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

- 14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

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

Restrictions on use (REACH, annex XVII):

Entry 55: 2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether

2010/75/EU (VOC): 9,5 % (94,62 g/l)

2004/42/EC (VOC): 18,5 % (184,26 g/l)

Additional information

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To follow: 850/2004/EC, 79/117/EEC, 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

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%

Relevant H and EUH statements (number and full text)

H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
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.)