

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 1 of 10

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

1.1. Product identifier

RemoCoat Basic

UFI: R5W2-M0H5-G00M-DY1F

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: | Christian 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

Skin Corr. 1; H314
Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

UFI: 4H00-60WQ-Q00Y-TJP3

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

γ-butyrolactones
1-aminopropan-2-ol; isopropanolamine
potassium hydroxide; caustic potash

Signal word: Danger

Pictograms:



Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 2 of 10

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash Hände thoroughly after handling.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures

Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|--|--------------|------------------|-------------|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | | | 50 - < 75 % |
| | 203-961-6 | 603-096-00-8 | | |
| | Eye Irrit. 2; H319 | | | |
| 96-48-0 | γ-butyrolactones | | | 15 - < 30 % |
| | 202-509-5 | | | |
| | Acute Tox. 4, Eye Dam. 1, STOT SE 3; H302 H318 H336 | | | |
| 34590-94-8 | Dipropylene glycol monomethyl ether, Isomerengem | | | 5 - < 15 % |
| | 252-104-2 | | 01-2119450011-60 | |
| | | | | |
| 78-96-6 | 1-aminopropan-2-ol; isopropanolamine | | | 1 - < 5 % |
| | 201-162-7 | 603-082-00-1 | | |
| | Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H312 H314 H318 | | | |
| 1310-58-3 | potassium hydroxide; caustic potash | | | 0.1 - < 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.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 3 of 10

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|------------|-----------|--|-------------|
| | | Specific Conc. Limits, M-factors and ATE | |
| 112-34-5 | 203-961-6 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | 50 - < 75 % |
| | | dermal: LD50 = 2746 mg/kg; oral: LD50 = 5660 mg/kg | |
| 96-48-0 | 202-509-5 | γ -butyrolactones | 15 - < 30 % |
| | | inhalation: LC50 = 5,1 mg/l (vapours); oral: LD50 = 1582 mg/kg | |
| 34590-94-8 | 252-104-2 | Dipropylene glycol monomethyl ether, Isomerengem | 5 - < 15 % |
| | | dermal: LD50 = 19020 mg/kg; oral: LD50 = 5130 mg/kg | |
| 78-96-6 | 201-162-7 | 1-aminopropan-2-ol; isopropanolamine | 1 - < 5 % |
| | | dermal: LD50 = 1851 mg/kg; oral: LD50 = 2813 mg/kg | |
| 1310-58-3 | 215-181-3 | potassium hydroxide; caustic potash | 0.1 - < 1 % |
| | | oral: LD50 = 388 mg/kg Skin Corr. 1A; H314: ≥ 5 - 100 Skin Corr. 1B; H314: ≥ 2 - < 5 Skin Irrit. 2; H315: $\geq 0,5$ - < 2 Eye Irrit. 2; H319: $\geq 0,5$ - < 2 | |

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

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

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 4 of 10

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. 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

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Absorb with liquid-binding material (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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

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, drink, smoke, sniff. 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.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Hints on joint storage

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 5 of 10

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) | |
| 112-34-5 | 2-(2-Butoxyethoxy)ethanol | 10 | 67.5 | | TWA (8 h) | |
| | | 15 | 101.2 | | STEL (15 min) | |
| 1310-58-3 | Potassium hydroxide | - | 2 | | STEL (15 min) | |

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective 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.

Skin protection

Use of 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: | colourless |
| Odour: | specific |
| Melting point/freezing point: | not determined |
| Boiling point or initial boiling point and boiling range: | not determined |
| Flammability: | not determined |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |
| Flash point: | > 70 °C |
| Auto-ignition temperature: | not determined |
| Decomposition temperature: | not determined |
| pH-Value (at 20 °C): | 11,8 |
| Water solubility: | easily soluble |
| Solubility in other solvents | not determined |
| Partition coefficient n-octanol/water: | not determined |
| Vapour pressure: | not determined |
| Density (at 20 °C): | 0,98 g/cm ³ |
| Relative vapour density: | not determined |

9.2. Other information

Information with regard to physical hazard classes



CLEANING TECHNOLOGY
Made in Germany

kolb Cleaning Technology GmbH

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 6 of 10

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Viscosity / dynamic:
(at 20 °C)

12 mPa·s

SECTION 10: Stability and reactivity

10.1. Reactivity

Possibility of hazardous reactions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Peroxides, Oxidizing agent.

10.4. Conditions to avoid

none

10.5. Incompatible materials

Keep away from: Acid, Oxidizing agent, Peroxides.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

ATEmix calculated

ATE (oral) 9040,0 mg/kg; ATE (dermal) 48710,5 mg/kg; ATE (inhalation vapour) 29,14 mg/l

CLEANING TECHNOLOGY
Made in Germany

kolb Cleaning Technology GmbH

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 7 of 10

Acute toxicity

| CAS No | Chemical name | | | | |
|------------|--|------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | | | | |
| | oral | LD50 5660 mg/kg | | | |
| | dermal | LD50 2746 mg/kg | | | |
| 96-48-0 | γ-butyrolactones | | | | |
| | oral | LD50 1582 mg/kg | Ratte | | |
| | inhalation (4 h) vapour | LC50 5,1 mg/l | | | |
| 34590-94-8 | Dipropylene glycol monomethyl ether, Isomerengem | | | | |
| | oral | LD50 5130 mg/kg | Ratte | AMA | |
| | dermal | LD50 19020 mg/kg | Ratte | | |
| 78-96-6 | 1-aminopropan-2-ol; isopropanolamine | | | | |
| | oral | LD50 2813 mg/kg | | | |
| | dermal | LD50 1851 mg/kg | | | |
| 1310-58-3 | potassium hydroxide; caustic potash | | | | |
| | oral | LD50 388 mg/kg | | | |

11.2. Information on other hazards**Other information**

There are no other hazards that require special attention.

Further information

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.

CLEANING TECHNOLOGY
Made in Germany

kolb Cleaning Technology GmbH

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 8 of 10

| CAS No | Chemical name | | | | | |
|------------|--|---------------|-----------|---------|--|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | | | | | |
| | Acute fish toxicity | LC50 mg/l | 1300 | 96 h | | |
| | Acute algae toxicity | ErC50 | 100 mg/l | | | |
| | Acute crustacea toxicity | EC50 | 100 mg/l | 48 h | | |
| 96-48-0 | γ-butyrolactones | | | | | |
| | Acute fish toxicity | LC50 | 56 mg/l | 96 h | | |
| | Acute algae toxicity | ErC50 mg/l | 1000 | 72 h | | |
| | Acute crustacea toxicity | EC50 | 500 mg/l | 48 h | | |
| 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) | |
| 78-96-6 | 1-aminopropan-2-ol; isopropanolamine | | | | | |
| | Acute fish toxicity | LC50 mg/l | 1000 | 96 h | | |
| | Acute crustacea toxicity | EC50 mg/l | 108,82 | 48 h | | |

12.2. Persistence and degradability

The product has not been tested.

| CAS No | Chemical name | | | |
|------------|--|-------|----|--------|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 96-48-0 | γ-butyrolactones | | | |
| | | 95% | 14 | |
| | leicht biologisch abbaubar | | | |
| 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 |

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The product has not been tested.

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 9 of 10

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. 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.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

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.

List of Wastes Code - residues/unused products

070701 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; aqueous washing liquids and mother liquors; hazardous waste

Contaminated packaging

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

SECTION 14: Transport information**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

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 3, Entry 55, Entry 75

2010/75/EU (VOC): 24,3 % (238,14 g/l)

2004/42/EC (VOC): 82,4 % (807,52 g/l)

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

RemoCoat Basic

Revision date: 16.01.2024

Product code: 090682-RM

Page 10 of 10

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%
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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

| Classification | Classification procedure |
|--------------------|--------------------------|
| Skin Corr. 1; H314 | On basis of test data |
| Eye Dam. 1; H318 | On basis of test data |

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.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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