

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 1 of 10

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

1.1. Product identifier

G50

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/ 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.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

caustic potash, potassium hydroxide solution 45%
Sodium metasilicate 5-hydrate

Signal word: Danger

Pictograms:



Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 2 of 10

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 or shower.
P363	Wash contaminated clothing 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.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container to .

Additional advice on labelling

UFI: FT10-T08P-A00D-QPE2

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
1310-58-3	caustic potash, potassium hydroxide solution 45%	5- < 10 %
	215-181-3	
	01-2119487136-33	
	Acute Tox. 4, Skin Corr. 1A; H302 H314	
7320-34-5	tetrapotassiumpyrophosphate	1 - < 5 %
	230-785-7	
	01-2119489369-18	
	Eye Irrit. 2; H319	
10213-79-3	Sodium metasilicate 5-hydrate	1 - < 5 %
	229-912-9	
	01-2119449811-37	
	Met. Corr. 1, Skin Corr. 1B, STOT SE 3; H290 H314 H335	

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
1310-58-3	215-181-3	caustic potash, potassium hydroxide solution 45%	5- < 10 %
		oral: LD50 = 606 mg/kg Skin Corr. 1A; H314: >= 11 - 100 Skin Corr. 1B; H314: >= 4,4 - < 11 Skin Irrit. 2; H315: >= 1,1 - < 4,4 Eye Irrit. 2; H319: >= 1,1 - < 4,4	
7320-34-5	230-785-7	tetrapotassiumpyrophosphate	1 - < 5 %
		dermal: LD50 = >7940 mg/kg; oral: LD50 = >2000 mg/kg	
10213-79-3	229-912-9	Sodium metasilicate 5-hydrate	1 - < 5 %
		oral: LD50 = 1400 mg/kg	

Labelling for contents according to Regulation (EC) No 648/2004

< 5 % phosphates, < 5 % non-ionic surfactants.

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 3 of 10

Medical examination necessary even merely on suspicion of intoxication.

After inhalation

Provide fresh air. Medical treatment necessary.

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 a physician.

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 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. 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. Rinse mouth thoroughly with water. Let water be drunk 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

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

General advice

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

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. Prevent spread over a wide area (e.g. by containment or oil barriers). Retain contaminated washing water and dispose it.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 4 of 10

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.

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 or drink. Personal protection equipment

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.

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

Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
10213-79-3	Sodium metasilicate 5-hydrate			
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	6,22 mg/m ³
Consumer DNEL, long-term		inhalation	systemic	1,55 mg/m ³
Worker DNEL, long-term		dermal	systemic	1,49 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,74 mg/kg bw/day

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 5 of 10

PNEC values

CAS No	Substance	Value
Environmental compartment		
10213-79-3	Sodium metasilicate 5-hydrate	
Freshwater		7,5 mg/l
Marine water		1 mg/l
Micro-organisms in sewage treatment plants (STP)		1000 mg/l

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.

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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:	Liquid
Colour:	colourless
Odour:	Lemon

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined

Flammability

Solid/liquid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined
pH-Value (at 20 °C):	13,7

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 6 of 10

Viscosity / dynamic: (at 20 °C)	29 mPa·s
Viscosity / kinematic: (at 40 °C)	22 mm ² /s
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):	1,078 g/cm ³
Relative vapour density:	not determined

9.2. Other information

Oxidizing properties
Not oxidising.

Solid content: not determined
Evaporation rate: not determined

Further Information

SECTION 10: Stability and reactivity

10.1. Reactivity

Possibility of hazardous reactions.

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.

SECTION 11: Toxicological information

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

Acute toxicity

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 7 of 10

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1310-58-3	caustic potash, potassium hydroxide solution 45%				
	oral	LD50 606 mg/kg	Rat	RTECS	
7320-34-5	tetrapotassiumpyrophosphate				
	oral	LD50 >2000 mg/kg	Ratte		
	dermal	LD50 >7940 mg/kg	Kaninchen		
10213-79-3	Sodium metasilicate 5-hydrate				
	oral	LD50 1400 mg/kg	Ratte		

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

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.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
1310-58-3	caustic potash, potassium hydroxide solution 45%					
	Acute fish toxicity	LC50 160 mg/l	96 h	Gambusia affinis	IUCLID	
7320-34-5	tetrapotassiumpyrophosphate					
	Acute fish toxicity	LC50 >100 mg/l	96 h	Regenbogenforelle (Oncorhynchus mykiss)	OECD 203	
10213-79-3	Sodium metasilicate 5-hydrate					
	Acute fish toxicity	LC50 3185 mg/l	96 h	Zebraabrbliing (Danio rerio)		
	Acute crustacea toxicity	EC50 4857 mg/l	48 h	Daphnia magna (Wasserfloh)		

12.2. Persistence and degradability

The product has not been tested.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 8 of 10

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7320-34-5	tetrapotassiumpyrophosphate	-2

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.

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

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)

<u>14.1. UN number or ID number:</u>	UN 1814
<u>14.2. UN proper shipping name:</u>	POTASSIUM HYDROXIDE SOLUTION
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	II
Hazard label:	8
Classification code:	C5
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	UN 1814
<u>14.2. UN proper shipping name:</u>	POTASSIUM HYDROXIDE SOLUTION
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	II
Hazard label:	8

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 9 of 10

Classification code: C5
 Limited quantity: 1 L
 Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 1814
14.2. UN proper shipping name: POTASSIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
 Hazard label: 8
 Special Provisions: -
 Limited quantity: 1 L
 Excepted quantity: E2
 EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1814
14.2. UN proper shipping name: POTASSIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
 Hazard label: 8
 Special Provisions: A3 A803
 Limited quantity Passenger: 0.5 L
 Passenger LQ: Y840
 Excepted quantity: E2
 IATA-packing instructions - Passenger: 851
 IATA-max. quantity - Passenger: 1 L
 IATA-packing instructions - Cargo: 855
 IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: strongly corrosive.

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

2010/75/EU (VOC): 0,00 g/L

2004/42/EC (VOC): 0,00 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 juveniles according to the 'juvenile work protection guideline' (94/33/EC).

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

G50

Revision date: 08.12.2022

Product code: 090620

Page 10 of 10

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
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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.)