

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### StoveEx

Revision date: 25.01.2018

Product code: 090693

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

### 1.1. Product identifier

StoveEx

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

#### Use of the substance/mixture

Professional cleaners for industrial use

### 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:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Harmful if swallowed.

Causes severe skin burns and eye damage.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

#### Hazard components for labelling

potassium hydroxide; caustic potash

2-aminoethanol; ethanolamine

Sodium metasilicate 5-hydrate

**Signal word:** Danger

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#### Pictograms:



#### Hazard statements

- H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.

#### Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P330 Rinse mouth.  
P331 Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P310 Immediately call a POISON CENTER/doctor.  
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

Cleaner on the basis of (according to EC Detergents Regulation 648/2004): amphoteric surfactants 1-5%, anionic surfactants 1-5%; silicates, alkalis, phosphates < 5 %, color

Sum formula: StoveEx

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
1310-58-3	potassium hydroxide; caustic potash			15 - < 20 %
	215-181-3	019-002-00-8		
	Acute Tox. 4, Skin Corr. 1A; H302 H314			
141-43-5	2-aminoethanol; ethanolamine			< 5 %
	205-483-3	603-030-00-8		
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B; H332 H312 H302 H314			
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.

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

< 5 % anionic surfactants.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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#### General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Medical examination necessary even merely on suspicion of intoxication.

#### After inhalation

Provide fresh air. Medical treatment necessary.

#### 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. 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 (CO<sub>2</sub>), Extinguishing powder

#### **5.2. Special hazards arising from the substance or mixture**

Non-flammable. Carbon dioxide (CO<sub>2</sub>), 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**

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.

#### **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.

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#### 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

Do not breathe gas/fumes/vapour/spray. 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 locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. 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

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
141-43-5	2-Aminoethanol	1	2.5		TWA (8 h)	WEL
		3	7.6		STEL (15 min)	WEL
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	WEL

##### 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 <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	1,55 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	1,49 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,74 mg/kg bw/day

##### 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

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#### 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.

##### **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.

#### **SECTION 9: Physical and chemical properties**

##### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellow
Odour:	specific
pH-Value (at 20 °C):	13,8
<b>Changes in the physical state</b>	
Melting point:	not determined
Initial boiling point and boiling range:	100 °C
Flash point:	not measurable
<b>Flammability</b>	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
<b>Auto-ignition temperature</b>	
Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined
<b>Oxidizing properties</b>	
Not oxidising.	
Vapour pressure:	not determined
Density (at 20 °C):	1,2 g/cm <sup>3</sup>
Water solubility:	full soluble in water.

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#### Solubility in other solvents

not determined

Partition coefficient:

not determined

Viscosity / dynamic:

38 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

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.

#### 10.6. Hazardous decomposition products

not known

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity

Harmful if swallowed.

##### ATEmix calculated

ATE (oral) 1436,6 mg/kg

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
1310-58-3	potassium hydroxide; caustic potash					
	oral	LD50 mg/kg	273	Rat	RTECS	
141-43-5	2-aminoethanol; ethanolamine					
	oral	LD50 mg/kg	1515	Rat		
	dermal	LD50 mg/kg	1025	Rabbit	IUCLID	
	inhalation vapour	ATE	11 mg/l			
	inhalation aerosol	ATE	1,5 mg/l			
10213-79-3	Sodium metasilicate 5-hydrate					
	oral	LD50 mg/kg	1400	Ratte		

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#### Irritation and corrosivity

Causes severe skin burns and 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	potassium hydroxide; caustic potash					
	Acute fish toxicity	LC50 80 mg/l	96 h	Gambusia affinis	IUCLID	
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		
10213-79-3	Sodium metasilicate 5-hydrate					
	Acute fish toxicity	LC50 3185 mg/l	96 h	Zebrabärbling (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.

### 12.3. Bioaccumulative potential

The product has not been tested.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
141-43-5	2-aminoethanol; ethanolamine	-1,91 (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.

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#### 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

##### 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)

<b>14.1. UN number:</b>	UN 1814
<b>14.2. UN proper shipping name:</b>	POTASSIUM HYDROXIDE SOLUTION
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	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)

<b>14.1. UN number:</b>	UN 1814
<b>14.2. UN proper shipping name:</b>	POTASSIUM HYDROXIDE SOLUTION
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8
Classification code:	C5
Limited quantity:	1 L
Excepted quantity:	E2

#### Marine transport (IMDG)

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

#### Air transport (ICAO-TI/IATA-DGR)



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<b>14.1. UN number:</b>	UN 1814
<b>14.2. UN proper shipping name:</b>	POTASSIUM HYDROXIDE SOLUTION
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	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. 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

2010/75/EU (VOC):	3,4 % (40,8 g/l)
2004/42/EC (VOC):	3,4 % (40,8 g/l)
Subcategory according to Directive 2004/42/EC:	Preparatory and cleaning - Pre-cleaner, VOC limit value: 200 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). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
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  
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



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CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

#### Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
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.)*