according to Regulation (EC) No 1907/2006

### **CONVOCIean forte S**

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

### 1.1. Product identifier

CONVOClean forte S

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

#### Use of the substance/mixture

Reserved for industrial and professional use.

### 1.3. Details of the supplier of the safety data sheet

Company name: Convotherm Elektrogeräte GmbH

Street: Talstr. 35
Place: D-82436 Eglfing

Telephone: +49 8847 67 0 Telefax: +49 8847 414

Contact person: Kundendienst - after sales

**1.4. Emergency telephone** +49 89 19240 Giftnotruf Rechts der Isar 24h Mo-So

number:

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Indications of danger: C - Corrosive

R phrases:

Causes severe burns.

# **GHS** classification

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements: May be corrosive to metals.

Harmful if swallowed.

Causes severe skin burns and eye damage.

### 2.2. Label elements

### Hazardous components which must be listed on the label

caustic potash, potassium hydroxide

Signal word: Danger

Pictograms: GHS05-GHS07





### **Hazard statements**

H290 May be corrosive to metals. H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

### **Precautionary statements**

P234 Keep only in original container.

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

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ 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.
P390 Absorb spillage to prevent material damage.

#### 2.3. Other hazards

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
215-181-3	caustic potash, potassium hydroxide	15 - < 20 %
1310-58-3	C - Corrosive, Xn - Harmful R22-35	
019-002-00-8	Acute Tox. 4, Skin Corr. 1A; H302 H314	

Full text of R and H phrases: see Section 16.

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

< 5 % phosphates, < 5 % phosphonates, < 5 % non-ionic surfactants, < 5 % anionic surfactants

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately. First aider: Pay attention to self-protection! Provide fresh air.

#### After inhalation

In case of inhaling spray mist, consult a physician. Provide fresh air. Seek medical advice immediately.

#### After contact with skin

After contact with skin, wash immediately with: Water. Subsequently wash off with: Polyethylene glykol 400. Do not wash off with soap or other alcaline cleaning agents. In case of skin irritation, seek medical treatment.

### After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist. Protect uninjured eye.

## After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Potential hazards: Stomach 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

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects). Skin corrosion/irritation: Causes severe skin burns and eye damage.

# 4.3. Indication of any immediate medical attention and special treatment needed

Caution if victim vomits: Risk of aspiration!

Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

### **SECTION 5: Firefighting measures**

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### 5.1. Extinguishing media

### Suitable extinguishing media

Use water spray jet to protect personnel and to cool endangered containers. Co-ordinate fire-fighting measures to the fire surroundings. Water. Foam. Dry extinguishing powder. ABC powder. Carbon dioxide (CO2). Atomized water.

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

Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire may be liberated: Carbon monoxide, Nitrogen oxides (NOx), Carbon dioxide (CO2).

#### 5.3. Advice for firefighters

The product itself does not burn. Wear a self-contained breathing apparatus and chemical protective clothing.

#### Additional information

Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains. In case of fire and/or explosion do not breathe fumes.

### **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. Wear personal protection equipment.

High slip hazard because of leaking or spilled product.

### 6.2. Environmental precautions

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

### 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. Clear contaminated areas thoroughly. Dilute with plenty of water. The contaminated area should be cleaned up immediately with: Water.

## 6.4. Reference to other sections

See protective measures under point 7 and 8. + 13

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Conditions to avoid: Formation of aerosol. All work processes must always be designed so that the following is as low as possible: inhalation. skin contact.

## Advice on protection against fire and explosion

The product is not combustible.

## 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Suitable floor material: Leachate-proof.

Suitable material for Container: polyethylene. Unsuitable materials for Container: metal.

Keep container tightly closed.

# Advice on storage compatibility

Keep only in the original container in a cool, well-ventilated place away from acids.

### Further information on storage conditions

Do not store at temperatures under: 5°C. Store only in original container.

according to Regulation (EC) No 1907/2006

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### 7.3. Specific end use(s)

Observe instructions for use.

#### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **Exposure limits (EH40)**

	CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
	1310-58-3	Potassium hydroxide	-	-		TWA (8 h)	WEL
I			-	2		STEL (15 min)	WEL

#### 8.2. Exposure controls

### Appropriate engineering controls

refer to chapter 7. Additional information about structure of technical plants: Work in well-ventilated zones or use proper respiratory protection. Do not breathe gas/fumes/vapour/spray.

# Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

#### Eye/face protection

Tightly sealed safety glasses.

#### Hand protection

Tested protective gloves are to be worn: Suitable material: Butyl rubber. (0,5mm), NBR (Nitrile rubber).

(0,35mm), penetration time (maximum wearing period): >480 Min.

Recommended protective gloves brand: Camatril Velour. Suitable splash guard: Dermatril.

Manufacturer: KCL Or comparable articles from other companies.

### Skin protection

Suitable protective clothing: Protective apron.

### Respiratory protection

Respiratory protection necessary at: insufficient ventilation.

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type of filter: P2.

#### **Environmental exposure controls**

No information available.

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

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

Physical state: liquid

Colour: light brown, clear

Odour: odourless

Test method

pH-Value (at 20 °C):

Changes in the physical state

Initial boiling point and boiling range: > 100 °C
Flash point: not applicable
Lower explosion limits: not applicable
Upper explosion limits: not applicable
Ignition temperature: not applicable

according to Regulation (EC) No 1907/2006

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Vapour pressure:	23 hPa						
(at 20 °C)							
Vapour pressure:	123 hPa						
(at 50 °C)							
Density (at 20 °C):	1,24 g/cm³						
Water solubility:	miscible						
(at 20 °C)							
Solubility in other solvents							
miscible with most organic solvents							
Viscosity / dynamic:	not determined						
Viscosity / kinematic:	not determined						
Flow time:	not determined						
Vapour density:	not determined						
Evaporation rate:	not determined						
9.2. Other information							
Solid content:	not determined						

Corrosion rate on steel or aluminum surfaces is >= 55mm per year at a test temperature of 6,25 °C

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Reacts with: acid. Carbon dioxide.

# 10.2. Chemical stability

not relevant

# 10.3. Possibility of hazardous reactions

Exothermic reactions with: acid. Violent reaction with: Acid.

Possibly extensive generation of hydrogen on contact with amphoteric metals (e.g. aluminium, lead, zinc) (explosive hazard!).

## 10.4. Conditions to avoid

Do not mix with acids. Do not mix with other chemicals. Protect against direct sunlight.

# 10.5. Incompatible materials

Light metals. acid. Oxidizing agents, strong. peroxides. Zinc. copper. Copper containing metals.

### 10.6. Hazardous decomposition products

Hydrogen. Gas/vapours, corrosive. Carbon dioxide.

#### **Further information**

Corrosive to metals. Slowly corrodes aluminium and zink under hydrogen evolution.

### **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

# Toxicocinetics, metabolism and distribution

No data available

### **Acute toxicity**

Harmful if swallowed.

#### **ATEmix** calculated

ATE (oral) 1516,7 mg/kg

according to Regulation (EC) No 1907/2006

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### **Acute toxicity**

CAS No	Chemical name						
	Exposure routes	Method	Dose	Species	Source		
1310-58-3	caustic potash, potassium hydroxide						
	oral	LD50	273 mg/kg	Rat	RTECS		

### Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes severe skin burns and eye damage. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

### Sensitising effects

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

Evaluation: not sensitising.

#### STOT-single exposure

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

### Severe effects after repeated or prolonged exposure

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

Evaluation: highly caustic.

### Carcinogenic/mutagenic/toxic effects for reproduction

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

Based on existing data the substance does not fullfill the criteria of CMR-substances Cat. 1 and 2 according 67/548/EEC.

# **Aspiration hazard**

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

### Specific effects in experiment on an animal

No data available

# **SECTION 12: Ecological information**

### 12.1. Toxicity

The product needs to apply neutralizing agents before draining to wastewater treatment plants.

Reduction of damage observed following neutralization.

CAS No	Chemical name							
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source		
1310-58-3	10-58-3 caustic potash, potassium hydroxide							
	Acute fish toxicity	LC50	80 mg/l	96 h	Gambusia affinis	IUCLID		

#### 12.2. Persistence and degradability

The product is an alkali. Before discharge into sewage plants the product normally needs to be neutralised. Reduction of damage observed following neutralization.

The surfactants contained in the product are biodegradable according to the requirements of the Detergent Directive 648/2004/EC.

### 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

#### 12.4. Mobility in soil

If product enters soil, it will be mobile and may contaminate groundwater.

# 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

### 12.6. Other adverse effects

none

according to Regulation (EC) No 1907/2006

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### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### Advice on disposal

Dispose of waste according to applicable legislation.

### Waste disposal number of waste from residues/unused products

060204 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of bases; sodium

and potassium hydroxide Classified as hazardous waste.

### Waste disposal number of used product

060204 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of bases; sodium

and potassium hydroxide Classified as hazardous waste.

#### Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances Classified as hazardous waste.

### Contaminated packaging

Water. Contaminated packing must be completely emptied and can be re-used following appropriate

cleaning.

Cleaned containers may be recycled.

## **SECTION 14: Transport information**

### Land transport (ADR/RID)

**14.1. UN number:** UN 1814

14.2. UN proper shipping name: POTASSIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code: C5
Limited quantity: 1 L
Transport category: 2
Hazard No: 80
Tunnel restriction code: E

### Other applicable information (land transport)

E2

Transport category: 2

### Inland waterways transport (ADN)

**14.1. UN number:** UN1814

14.2. UN proper shipping name: POTASSIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es):

14.4. Packing group:

Hazard label:

8

according to Regulation (EC) No 1907/2006

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Classification code: C5 Limited quantity: 1 L

Other applicable information (inland waterways transport)

E

Marine transport (IMDG)

**14.1. UN number:** UN1814

14.2. UN proper shipping name: POTASSIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Special Provisions: - Limited quantity: 1 L
EmS: F-A, S-B

Other applicable information (marine transport)

Special provisions: -

E2

Air transport (ICAO)

**14.1. UN number:** UN 1814

**14.2. UN proper shipping name:** POTASSIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Special Provisions:
A3 A803
Limited quantity Passenger:
0.5 L

IATA-packing instructions - Passenger: 851
IATA-max. quantity - Passenger: 1 L
IATA-packing instructions - Cargo: 855
IATA-max. quantity - Cargo: 30 L

Other applicable information (air transport)

E2 : Y840

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Call a POISON CENTER or doctor/physician if you feel unwell.

Warning Corrosive. May be corrosive to metals.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not relevant

according to Regulation (EC) No 1907/2006

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### **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### **EU** regulatory information

#### Additional information

The surfactants contained in the product are biodegradable according to the requirements of the Detergent Directive 648/2004/EC. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

## National regulatory information

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**

#### Changes

\* Data changed compared with the previous version

### Full text of R phrases referred to under Sections 2 and 3

Harmful if swallowed.Causes severe burns.

### Full text of H statements referred to under Sections 2 and 3

H290 May be corrosive to metals. H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

## **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.)