according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 1 of 9

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

1.1. Product identifier

CONVOCal forte, descaler

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

Use of the substance/mixture

The product is intended for 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

Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: Xi - Irritant

R phrases:

Irritating to eyes, respiratory system and skin.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

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

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

May be corrosive to metals. Causes skin irritation.

Causes serious eye irritation. May cause respiratory irritation.

2.2. Label elements

Hazardous components which must be listed on the label

Hydrochloric acid 31-33 %

Signal word: Warning Pictograms: GHS07



Hazard statements

H290 May be corrosive to metals. H315 Causes skin irritation.

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 2 of 9

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Special labelling of certain mixtures

EUH208 Contains methenamine; hexamethylenetetramine. May produce an allergic reaction.

Additional advice on labelling

The classification was carried out for tested properties according to the substance directive (67/548/EWG), annex VI, otherwise according to the calculation procedure described in the preparation directive (1999/45/EG).

2.3. Other hazards

The preparation is dangerous in the sense of Directive 1999/45/EC.

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
231-595-7	Hydrochloric acid 31-33 %	10 - < 25 %
	C - Corrosive, Xi - Irritant R34-37	
017-002-01-X	Skin Corr. 1B, STOT SE 3; H314 H335	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing immediately and dispose off safely. If victim is at risk of losing consciousness, position and transport on their side. Medical treatment necessary. First aider: Pay attention to self-protection!

After inhalation

Move victim to fresh air. Put victim at rest and keep warm. Position and transport victim on their side. In case of respiratory distress, bring into semi-upright, seated position. In case of breathing difficulties administer oxygen.

After contact with skin

After contact with skin, wash immediately with: Water. 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. Subsequently consult an ophthalmologist. Protect uninjured eye.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 3 of 9

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

May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation.

 $The following \ symptoms \ may \ occur: \ after \ ingestion: \ Spasms, \ Gastrointestinal \ complaints, \ Nausea,$

Intestinal colic.

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

First Aid, decontamination, treatment of symptoms.

Subsequent observance for pneumonia and lung oedema, gastro-intestinal ailment, vomiting,

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Gases/vapours, toxic, Hydrochloric gas, Nitrogen oxides (NOx).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Wear chemical resistant suit. In case of fire: Use acid-proof equipment only.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

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

Wear personal protection equipment. Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray. Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Cover drains.

6.3. Methods and material for containment and cleaning up

Suitable material for diluting or neutralizing: Water. 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. Provide adequate ventilation.

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. Avoid contact with skin and eyes. Provide adequate ventilation.

Advice on protection against fire and explosion

The product itself does not burn.

Further information on handling

When diluting, always get the water first and then add the product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container. Keep container tightly closed in a cool, well-ventilated place.

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 4 of 9

Suitable material for floor covering: Acid proof.

Advice on storage compatibility

Keep only in the original container in a cool, well-ventilated place away from alkalis. Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Do not store at temperatures under: 5°C. Keep only in the original container in a cool, well-ventilated place.

7.3. Specific end use(s)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2. Exposure controls

Appropriate engineering controls

No special measures are necessary.

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. Avoid contact with skin, eyes and clothes.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Recommended protective gloves brand: It is recommended to wear special 0.11mm-layer gloves produced out of nitrile by KCL company (Dermatril, item nr. 740).

Tested protective gloves are to be worn: Suitable material: Butyl caoutchouc (butyl rubber) (0,5mm); NBR (Nitrile rubber) (0,35mm); penetration time (maximum wearing period): >480 Min.

Skin protection

Protective apron. acid proof.

Respiratory protection

Suitable respiratory protective equipment:, Combination filter device (DIN EN 141).. E - P 2

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: clear, light yellow

Odour: pungent

Test method

pH-Value (at 20 °C): 0 - 1

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

109 °C

Flash point:

not determined

not applicable

Revision No: 2,00 GB - EN Revision date: 11.02.2015

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 5 of 9

Explosive properties

not applicable

Lower explosion limits:

Upper explosion limits:

Inot applicable
Ignition temperature:

Vapour pressure:

(at 20 °C)

Vapour pressure:

(at 50 °C)

Page 14 20 °C):

107 e/cm³

Density (at 20 °C):

Water solubility:

Viscosity / dynamic:

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

Exothermic reactions with: Alkali (lye), Oxidising agent, strong. Release of: Chlorine, Hydrogen.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

The product develops hydrogen in an aqueous solution in contact with metals.

10.4. Conditions to avoid

Protect against direct sunlight. Keep in a cool place. Protect against: frost.

10.5. Incompatible materials

Alkali (Iye), Oxidising agent, Light metals, Amines, Ammonia (NH3).

10.6. Hazardous decomposition products

Hydrochloric gas, Nitrogen oxides (NOx).

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

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

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 6 of 9

CAS No	Chemical name								
	Exposure routes	Method	Dose	Species	Source				
	Hydrochloric acid 31-33 %								
	oral	LD50 mg/kg	238 - 277	Rat					
	inhalative (1 h) vapour	LC50	> 4,2 mg/l	Rat					

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

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

STOT-single exposure

May cause respiratory irritation. (Hydrochloric acid 31-33 %)

Severe effects after repeated or prolonged exposure

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

After neutralisation no further toxicity can be observed.

CAS No	Chemical name									
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source				
	Hydrochloric acid 31-33 %									
	Acute fish toxicity	LC50	862 mg/l	96 h	Leuciscus idus					

12.2. Persistence and degradability

Product is acid. The product needs to apply neutralizing agents before draining to wastewater treatment plants. The methods for determining the biological degradability are not applicable to inorganic substances. Inorganic product which is not eliminable from water through biological cleaning processes.

12.3. Bioaccumulative potential

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely.

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

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 7 of 9

Waste disposal number of waste from residues/unused products

060102 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation,

supply and use (MFSU) of acids; hydrochloric acid

Classified as hazardous waste.

Waste disposal number of used product

060102 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation,

supply and use (MFSU) of acids; hydrochloric acid

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 packages must be completely emptied and can be re-used following proper cleaning.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1789

14.2. UN proper shipping name: HYDROCHLORIC ACID

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



Classification code: C1
Special Provisions: 520
Limited quantity: 5 L
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

E1

Inland waterways transport (ADN)

14.1. UN number: UN 1789

14.2. UN proper shipping name: HYDROCHLORIC ACID

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



Classification code: C1
Special Provisions: 520
Limited quantity: 5 L

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 8 of 9

Other applicable information (inland waterways transport)

F1

Marine transport (IMDG)

14.1. UN number: UN 1789

14.2. UN proper shipping name: HYDROCHLORIC ACID

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



Marine pollutant:

Special Provisions:

Limited quantity:

EmS:

223

5 L

F-A, S-B

Other applicable information (marine transport)

F1

Air transport (ICAO)

14.1. UN number: UN 1789

14.2. UN proper shipping name: HYDROCHLORIC ACID

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



Special Provisions: A3 A803

Limited quantity Passenger: 1 L

IATA-packing instructions - Passenger:852IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:856IATA-max. quantity - Cargo:60 L

Other applicable information (air transport)

±1 : Y841

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Call a POISON CENTER/doctor/.?/ if you feel unwell.

May be corrosive to metals.

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

not relevant

SECTION 15: Regulatory information

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

National regulatory information

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Print date: 12.03.2015 Product code: 3007023 Page 9 of 9

Employment restrictions: Observe employment restrictions for young people. Observe employment

restrictions for child bearing mothers and nursing.

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

Relevant R-phrases (Number and full text)

34 Causes burns.

37 Irritating to respiratory system.

Relevant H- and EUH-phrases (Number and full text)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

EUH208 Contains methenamine; hexamethylenetetramine. May produce an allergic reaction.

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.)