

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 1 of 10

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

Washing and cleaning products (including solvent based products)
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
Contact person: Kundendienst - after sales
Telefax: +49 8847 414

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

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

Regulation (EC) No. 1272/2008

Hazard components for labelling

Hydrochloric acid

Signal word: Warning

Pictograms:



Hazard statements

H290 May be corrosive to metals.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements

P234 Keep only in original packaging.
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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCaI forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 2 of 10

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. May produce an allergic reaction.

2.3. Other hazards

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

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
	Hydrochloric acid			10 - < 25 %
	231-595-7	017-002-01-X	01-2119484862-27	
	Met. Corr. 1, Skin Corr. 1B, STOT SE 3; H290 H314 H335			
100-97-0	methenamine			0,1 - < 1,0 %
	202-905-8	612-101-00-2	01-2119474895-20	
	Flam. Sol. 2, Skin Sens. 1; H228 H317			

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

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

preservation agents (Methenamine).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately. If unconscious place in recovery position and seek medical advice. First aider: Pay attention to self-protection!

After inhalation

Remove casualty to fresh air and keep warm and at rest. Where appropriate artificial ventilation.

After contact with skin

After contact with skin, wash immediately with plenty of water. In case of skin irritation, consult a physician.

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.

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

May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation. Spasms, Gastrointestinal complaints, Nausea, Intestinal colic Respiratory complaints.

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.

SECTION 5: Firefighting measures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 3 of 10

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

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

Use personal protection equipment. 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.

Provide adequate ventilation. 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.

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with eyes and skin.

Advice on protection against fire and explosion

The product itself does not burn.

Further information on handling

When diluting/dissolving, always have the water ready first, then slowly stir in the product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Suitable floor material: acid-resistant.

Advice on storage compatibility

Do not store together with: Alkali (lye). Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Do not store at temperatures below 5 °C

7.3. Specific end use(s)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 4 of 10

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
100-97-0	methenamine			
Worker DNEL, acute		dermal	systemic	229 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	1400 mg/m ³
Worker DNEL, long-term		dermal	systemic	8,8 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	31 mg/m ³
Consumer DNEL, acute		dermal	systemic	22,9 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	140 mg/m ³
Consumer DNEL, acute		oral	systemic	20 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	1,9 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,95 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	6,7 mg/m ³

PNEC values

CAS No	Substance	Value
100-97-0	methenamine	
Freshwater		3 mg/l
Marine water		0,5 mg/l
Freshwater sediment		2,4 mg/kg
Marine sediment		0,4 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l

8.2. Exposure controls

Appropriate engineering controls

See section 7. No additional measures necessary.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Use protective skin cream before handling the product. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothes.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

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.

Recommended protective gloves brand: Camatril Velour, Manufacturer: KCL; Or comparable articles from

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 5 of 10

other companies.

Skin protection

Protective apron, acid-resistant.

Respiratory protection

Suitable respiratory protection apparatus: Combination filtering device (EN 14387); E-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:	clear, light yellow
Odour:	pungent

Test method

pH-Value (at 20 °C):	0 - 1
----------------------	-------

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	109 °C
Flash point:	not applicable

Explosive properties

not applicable

Lower explosion limits:	not applicable
-------------------------	----------------

Upper explosion limits:	not applicable
-------------------------	----------------

Ignition temperature:	not applicable
-----------------------	----------------

Vapour pressure: (at 20 °C)	23 hPa
--------------------------------	--------

Vapour pressure: (at 50 °C)	123 hPa
--------------------------------	---------

Density (at 20 °C):	1,07 g/cm ³
---------------------	------------------------

Water solubility:	miscible
-------------------	----------

Viscosity / dynamic:	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 at a test temperature of 55 °C >= 6,25 mm per year

SECTION 10: Stability and reactivity**10.1. Reactivity**

Exothermic reaction with: Alkali (lye), Oxidising agent, strong.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Alkali (lye), Oxidising agent, strong.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 6 of 10

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

10.4. Conditions to avoid

Keep cool. Protect from sunlight. Protect against: Frost

10.5. Incompatible materials

Alkali (lye) Oxidising agent, strong, Light metals, Amines, Ammonia.

10.6. Hazardous decomposition products

Hydrochloric gas, Chlorine, Hydrogen, Nitrogen oxides (NO_x).

Further information

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
	Hydrochloric acid				
	dermal	LD50 > 5000 mg/kg	Rabbit		
100-97-0	methenamine				
	oral	LD50 9200 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rat		

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

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

May cause respiratory irritation. (Hydrochloric acid)

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.

SECTION 12: Ecological information

12.1. Toxicity

After neutralisation no further toxicity can be observed.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 7 of 10

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
	Hydrochloric acid					
	Acute fish toxicity	LC50	282 mg/l	96 h	Gambusia affinis (Mosquito fish)	
	Acute algae toxicity	ErC50 mg/l	0,73	72 h	Chlorella vulgaris	
	Acute crustacea toxicity	EC50 mg/l	4,92	48 h	Daphnia magna (Big water flea)	
100-97-0	methenamine					
	Acute fish toxicity	LC50 mg/l	49800	96 h	Pimephales promelas (fathead minnow)	OECD 203
	Acute crustacea toxicity	EC50 mg/l	36000	48 h	Daphnia magna (Big water flea)	OECD 202
	Algae toxicity	NOEC mg/l	1500	14 d	Pseudokirchneriella subcapitata	OECD 201

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.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
100-97-0	methenamine				
	OECD 301D	8 %			

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.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	Hydrochloric acid	-0,25
100-97-0	methenamine	-4,15

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

12.6. Other adverse effects

The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised.

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

060102 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; hydrochloric acid; hazardous waste

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCaI forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 8 of 10

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; 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 hazardous substances; 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): 8
14.4. Packing group: III
 Hazard label: 8



Classification code: C1
 Special Provisions: 520
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 80
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 1789
14.2. UN proper shipping name: HYDROCHLORIC ACID
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Classification code: C1
 Special Provisions: 520
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1789
14.2. UN proper shipping name: HYDROCHLORIC ACID
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 9 of 10



Marine pollutant: -
 Special Provisions: 223
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1789
14.2. UN proper shipping name: HYDROCHLORIC ACID
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Special Provisions: A3 A803
 Limited quantity Passenger: 1 L
 Passenger LQ: Y841
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 852
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 856
 IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Call a POISON CENTER if you feel unwell.
 May be corrosive to metals.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

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): not relevant

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): 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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CONVOCal forte, descaler

Revision date: 07.12.2017

Product code: 3007023

Page 10 of 10

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

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H228	Flammable solid.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
EUH208	Contains methenamine. 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.)