

Safety Data Sheet

according to UK REACH Regulation

CONVOCal, descaler

Revision date: 03.08.2023

Product code: 3007018

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

CONVOCal, descaler

UFI: U12S-5U9R-6J91-X0WY

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

Cleaning agent

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
E-mail:	info@welbilt.com	
Contact person:	Kundendienst - after sales	
E-mail:	info@welbilt.com	

1.4. Emergency telephone number: England and Wales (NHS Direct): 111 Scotland (NHS 24): 111

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Met. Corr. 1; H290

Skin Irrit. 2; H315

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Signal word:** Warning**Pictograms:****Hazard statements**

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

Precautionary statements

P234	Keep only in original packaging.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.
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Additional advice on labelling

The mixture has a low buffer capacity (Acid/Alkaline reserve). (Young et al.)

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 (GB CLP Regulation)			
5329-14-6	sulfamic acid			5 - < 10 %
	226-218-8	016-026-00-0	01-2119488633-28	
	Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 3; H315 H319 H412			
7664-38-2	Phosphoric acid			5 - < 10 %
	231-633-2	015-011-00-6	01-2119485924-24	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B; H290 H302 H314			
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.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
5329-14-6	226-218-8	sulfamic acid	5 - < 10 %
		oral: LD50 = 3160 mg/kg	
7664-38-2	231-633-2	Phosphoric acid	5 - < 10 %
		dermal: LD50 = 2740 mg/kg; oral: LD50 = 1250 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25	
100-97-0	202-905-8	methenamine	0,1 - < 1,0 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 9200 mg/kg	

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**

Take off contaminated clothing.

After inhalation

Provide fresh air.

After contact with skin

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, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Protect uninjured eye.

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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

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**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: Sulphur dioxide (SO₂), Phosphorus oxides, Nitrogen oxides (NO_x), Gases/vapours, toxic.

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****General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

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**For containment**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Suitable material for diluting or neutralizing: Water.

Other information

Provide adequate ventilation. 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 skin, eyes and clothes.

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Advice on protection against fire and explosion

The product itself does not burn.

Advice on general occupational hygiene

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, smoke, sniff. Avoid contact with skin, eyes and clothes.

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.

Suitable floor material: acid-resistant.

Hints on joint storage

Do not store together with: Alkali (lye).

Keep away from: Food and 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**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
7664-38-2	Phosphoric acid			
	Worker DNEL, long-term	inhalation	local	2,92 mg/m ³
	Consumer DNEL, long-term	inhalation	local	0,73 mg/m ³
	Worker DNEL, long-term	inhalation	systemic	1 mg/m ³
100-97-0	methenamine			
	Worker DNEL, long-term	dermal	systemic	6,4 mg/kg bw/day
	Worker DNEL, long-term	inhalation	systemic	5,6 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	3,2 mg/kg bw/day
	Consumer DNEL, long-term	oral	systemic	0,8 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	systemic	1,2 mg/m ³

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PNEC values

CAS No	Substance	Value
Environmental compartment		
5329-14-6	sulfamic acid	
Freshwater		0,048 mg/l
Marine water		0,0048 mg/l
Freshwater sediment		0,173 mg/kg
Marine sediment		0,0173 mg/kg
Micro-organisms in sewage treatment plants (STP)		2 mg/l
Soil		0,00638 mg/kg
100-97-0	methenamine	
Freshwater		3 mg/l
Marine water		0,3 mg/l
Freshwater sediment		10,2 mg/kg
Marine sediment		1,02 mg/kg
Secondary poisoning		50 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,28 mg/kg

8.2. Exposure controls**Appropriate engineering controls**

See section 7. No additional measures necessary.

Individual protection measures, such as personal protective equipment**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 other companies.

Skin protection

Protective apron. acid proof.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Suitable respiratory protective equipment: Particle filter device (EN 143), 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:	light red	
Odour:	odourless	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		98 °C
Flammability:		not applicable

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Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Flash point:	not applicable
Auto-ignition temperature:	not applicable
Decomposition temperature:	not determined
pH-Value (at 20 °C):	0 - 1
Water solubility: (at 20 °C)	completely miscible
Solubility in other solvents not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	23 hPa
Vapour pressure: (at 50 °C)	123 hPa
Density (at 20 °C):	1,082 g/cm ³
Relative vapour density:	not determined

9.2. Other information**Information with regard to physical hazard classes**

Explosive properties

not applicable

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Viscosity / dynamic:

not determined

Further Information

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).

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).

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

10.4. Conditions to avoid

Decomposition temperature > 205°C

10.5. Incompatible materials

Alkali (lye), Light metals.

10.6. Hazardous decomposition productsNitrogen oxides (NOx), Sulphur oxides, Sulphur dioxide (SO₂), Phosphorus oxides, Gases/vapours, corrosive.**Further information**

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

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SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
5329-14-6	sulfamic acid				
	oral	LD50 mg/kg	3160	Rat	
7664-38-2	Phosphoric acid				
	oral	LD50 mg/kg	1250	Rat	
	dermal	LD50 mg/kg	2740	Rabbit	
100-97-0	methenamine				
	oral	LD50 mg/kg	9200	Rat	
	dermal	LD50 mg/kg	> 2000	Rat	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

Contains methenamine. May produce an allergic reaction.

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.

11.2. Information on other hazards**Endocrine disrupting properties**

not applicable

SECTION 12: Ecological information**12.1. Toxicity**

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

After neutralisation, reduction in toxic effects is observed.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
5329-14-6	sulfamic acid					
	Acute fish toxicity	LC50 mg/l	70,3	96 h	Pimephales promelas (fathead minnow)	
7664-38-2	Phosphoric acid					
	Acute fish toxicity	LC50	138 mg/l	96 h	Gambusia affinis	
	Acute crustacea toxicity	EC50 mg/l	>100	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
	Acute bacteria toxicity	(EC50 mg/l)	> 5000	0,5 h		

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	35 %	28	
	Not readily biodegradable (according to OECD criteria)			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
100-97-0	methenamine	-2,18

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 UK REACH.

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

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.
not applicable

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

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Disposal recommendations

Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

060106 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; other acids; hazardous waste

List of Wastes Code - used product

060106 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; other acids; hazardous waste

List of Wastes Code - 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 or ID number: UN 1805
14.2. UN proper shipping name: PHOSPHORIC ACID, SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Classification code: C1
 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 or ID number: UN 1805
14.2. UN proper shipping name: PHOSPHORIC ACID, SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Classification code: C1
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1805
14.2. UN proper shipping name: PHOSPHORIC ACID SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8

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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 or ID number: UN 1805
14.2. UN proper shipping name: PHOSPHORIC ACID, SOLUTION
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

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

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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, Entry 75

2010/75/EU (VOC): not relevant

Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles 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 hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

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SECTION 16: Other information**Abbreviations and acronyms**

Met. Corr: Corrosive to metals

Flam. Sol: Flammable solids

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

Eye Irrit: Eye irritation

Skin Sens: Skin sensitisation

Aquatic Chronic: Chronic aquatic hazard

Classification for mixtures and used evaluation method according to GB CLP Regulation

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

Relevant H and EUH statements (number and full text)

H228	Flammable solid.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
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.)