according to Regulation (EC) No 1907/2006

CONVOCare K, concentrate to be diluted 1:29 with water

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

1.1. Product identifier

CONVOCare K, concentrate to be diluted 1:29 with water

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

Use of the substance/mixture

Restricted to professional users.

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 number:	+49 89 19240 Giftnotruf Rechts der Is	sar 24h Mo-So

number:

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 Serious eye damage/eye irritation: Eye Dam. 1 Hazard Statements: May be corrosive to metals. Causes serious eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Phosphoric acid ... %; orthophosphoric acid Phosphoric acid, mixed esters with Bu alc. and ethylene glycol Amines, C12-14 (even numbered) -alkyldimethyl, N-oxides

Signal word:

Pictograms:



Hazard statements

H290	May be corrosive to metals.
H318	Causes serious eye damage.

Danger

Precautionary statements

countionaly statemen	
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.
P310	Immediately call a POISON CENTER/doctor.
P390	Absorb spillage to prevent material damage.
P406	Store in a corrosion-resistant container with a resistant inner liner.

Additional advice on labelling

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

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2.3. Other hazards

Special danger of slipping by leaking/spilling product.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification according to Regula	tion (EC) No. 1272/2008 [CLP]	•			
7664-38-2	Phosphoric acid			< 15 %		
	231-633-2	231-633-2 015-011-00-6 01-2119485924-24				
	Met. Corr. 1, Skin Corr. 1B; H290 H314					
68439-51-0	Alcohols, C12-14 (even numbered), ethoxylated propoxylated (> 2.5 moles EO/PO)					
	931-986-9		-			
	Aquatic Chronic 3; H412					
	Amines, C12-14 (even numbered) -alkyldimethyl, N-oxides					
	931-292-6		01-2119490061-47			
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 2; H302 H315 H318 H400 H411					

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

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

< 5 % non-ionic surfactants, < 5 % anionic surfactants, < 5 % amphoteric surfactants.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If victim is at risk of losing consciousness, position and transport on their side. Take off contaminated clothing.

After inhalation

In case of inhaling spray mist, consult a doctor immediately and show him packing or label. Provide fresh air.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

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 ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

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

Observe risk of aspiration if vomiting occurs. Causes serious eye damage.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

according to Regulation (EC) No 1907/2006

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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: Phosphorus oxides, Nitrogen oxides (NOx), Gases/vapours, toxic.

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

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. Retain contaminated washing water and dispose it.

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).

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

Avoid: generation/formation of aerosols. Use only in well-ventilated areas.

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

Suitable container/equipment material: Polyethylene; Unsuitable container/equipment material: Metal, Light metal.

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

according to Regulation (EC) No 1907/2006

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	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					
DNEL type		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/m³		
Worker DNEL,	long-term	inhalation	systemic	1 mg/m³		

8.2. Exposure controls

Appropriate engineering controls

See section 7. No additional measures 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

Tested protective gloves are to be worn: Suitable material: Butyl caoutchouc (butyl rubber) (0,5mm); penetration time (maximum wearing period): >480 Min. Single-use gloves. It is recommended to wear special 0.11mm-layer gloves produced out of nitrile by KCL company (Dermatril, item nr. 740).

Skin protection

Protective apron, acid-resistant.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at: aerosol or mist generation. Suitable respiratory protective equipment: particulates filter device (DIN 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

and ci basic priysical and ci	lennical properties		
Physical state:	liquid		
Colour:	green		
Odour:	characteristic		
			Test method
pH-Value (at 20 °C):		0 - 1	
Changes in the physical state			
Melting point:		not determined	
Initial boiling point and boiling range:		100 °C	
Flash point:		> 150 °C	

according to Regulation (EC) No 1907/2006

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Explosive properties not applicable		
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Ignition temperature:	not determined	
Vapour pressure: (at 20 °C)	23 hPa	
Vapour pressure: (at 50 °C)	123 hPa	
Density (at 20 °C):	1,055 g/cm³	
Bulk density:	not applicable	
Water solubility: (at 20 °C)	miscible	
Viscosity / dynamic:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	
9.2. Other information		
Solid content:	not determined	

Acidic reserve [g NaOH/100 g product]: 4,0

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).

10.4. Conditions to avoid

Protect against direct sunlight. Decompostion takes place from temperatures above: > 75 °C

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

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

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.

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CAS No	Chemical name	Chemical name							
	Exposure route	Dose		Species	Source	Method			
7664-38-2	Phosphoric acid								
	oral	LD50 2 mg/kg	2600	Rat					
	dermal	LD50 2 mg/kg	2740	Rabbit					
68439-51-0	Alcohols, C12-14 (even n	umbered), etho	oxylated p	ropoxylated (> 2.5 moles E	EO/PO)				
	oral	LD50 > mg/kg	> 2000	Rat					
	Amines, C12-14 (even nu	imbered) -alkyl	ldimethyl, I	N-oxides					
	oral	LD50 > mg/kg	> 2000	Rat					
	dermal	LD50 > mg/kg	> 2000	Rat					

Irritation and corrosivity

Causes serious eye damage.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

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.

Specific effects in experiment on an animal

No data available

SECTION 12: Ecological information

12.1. Toxicity

The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised. After neutralisation no further toxicity can be observed.

according to Regulation (EC) No 1907/2006

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CAS No	Chemical name								
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method		
7664-38-2	Phosphoric acid	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)				
68439-51-0	Alcohols, C12-14 (even n	umbered), eth	noxylated p	ropoxylat	ed (> 2.5 moles EO/PO)				
	Acute fish toxicity	LC50 mg/l	> 1 - 10	96 h	Poecilia reticulata (Guppy)		OECD 203		
	Acute algae toxicity	ErC50 mg/l	> 1 - 10	72 h	Desmodesmus subspicatus		OECD 201		
	Acute crustacea toxicity	EC50 mg/l	> 1 - 10		Daphnia magna (Big water flea)		OECD 202		
	Acute bacteria toxicity	(> 10000 r	ng/l)		Pseudomonas putida				
	Amines, C12-14 (even nu	mbered) -alky	/Idimethyl, I	N-oxides					
	Acute fish toxicity	LC50 mg/l	1,26	96 h	Oncorhynchus mykiss (Rainbow trout)				
	Acute algae toxicity	ErC50 mg/l	0,19	72 h	Pseudokirchneriella subcapitata				
	Acute crustacea toxicity	EC50	2,9 mg/l	48 h	Daphnia magna (Big water flea)				

12.2. Persistence and degradability

The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
68439-51-0	Alcohols, C12-14 (even numbered), ethoxylated propoxylated (>	2.5 moles EO/PO)		
	OECD 301B	> 60 %	28	

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	Amines, C12-14 (even numbered) -alkyldimethyl, N-oxides	< 2,7

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

No information available.

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

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Waste disposal number of waste from residues/unused products

060104 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; phosphoric and phosphorous acid; hazardous waste

Waste disposal number of used product

060104 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; phosphoric and phosphorous 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 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)

<u>14.1. UN number:</u>	UN 1805
14.2. UN proper shipping name:	PHOSPHORIC ACID SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	111
Hazard label:	8
	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)	
<u>14.1. UN number:</u>	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
	<u>Í</u>
	8
Classification code:	C1 Č
Limited quantity:	5 L
Excepted quantity:	E1
Marine transport (IMDG)	
<u>14.1. UN number:</u>	UN 1805
14.2. UN proper shipping name:	PHOSPHORIC ACID SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	III

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Hazard label:	8	
Marine pollutant:	· · · · · · · · · · · · · · · · · · ·	
Special Provisions:	223	
Limited quantity:	5 L	
Excepted quantity:	E1	
EmS:	F-A, S-B	
Air transport (ICAO-TI/IATA-DGR)	1014005	
14.1. UN number:		
14.2. UN proper shipping name:	PHOSPHORIC ACID SOLUTION	
14.3. Transport hazard class(es):	8	
<u>14.4. Packing group:</u> Hazard label:	 8	
Special Provisions:	A3 A803	
Limited quantity Passenger:	1L	
Passenger LQ:	Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	852	
IATA-max. quantity - Passenger: IATA-packing instructions - Cargo:	5 L 856	
IATA-packing instituctions - Cargo:	60 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	20	
	no	
14.6. Special precautions for user May be corrosive to metals.		
14.7. Transport in bulk according to Annex	II of Marpol and the IBC Code	
not relevant	<u></u>	
Other applicable information		
Corrosion rate on steel or aluminum s	urfaces at a test temperature of 55 °C >= 6,25 mm per ye	ar
SECTION 15: Regulatory information		
15.1. Safety, health and environmental requ	lations/legislation specific for the substance or mixtur	e
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: Phosphoric acid		

Entry 3: Phosphoric acid 2010/75/EU (VOC):

not relevant

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

according to Regulation (EC) No 1907/2006

CONVOCare K, concentrate to be diluted 1:29 with water Revision date: 07.12.2017 Product code: 3007028 Page 10 of 10 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

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
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The product should only be handled by persons over the age of 18, who were informed sufficiently about the dangerous nature or the product and about the necessary safety precautions.

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.)