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 +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 and skin.

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

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

Hazardous components which must be listed on the label

Phosphoric acid 75 %; orthophosphoric acid

Lauramine oxide

Signal word: Danger Pictograms: GHS05



Hazard statements

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

Precautionary statements

P234 Keep only in original container.

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.

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	P390	Absorb spillage to prevent material damage.			
	P406	Store in corrosive resistant container with a resistant inner liner.			

2.3. Other hazards

Special danger of slipping by leaking/spilling product.

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		
231-633-2	Phosphoric acid 75 %; orthophosphoric acid	< 15 %
7664-38-2	C - Corrosive R34	
015-011-00-6	Skin Corr. 1B; H314	
931-986-9	PPG-4 Laureth-5	< 5 %
68439-51-0		
	Aquatic Chronic 3; H412	
216-700-6	Lauramine oxide	1 - < 5 %
1643-20-5	Xi - Irritant R38-41	
	Skin Irrit. 2, Eye Dam. 1, Aquatic Acute 2, Aquatic Chronic 2; H315 H318 H401 H411	
01-2119490061-47		

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

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

5 % - 15 % non-ionic surfactants. < 5 % anionic 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: Water and soap. 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 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

Caution if victim vomits: Risk of aspiration!

Causes serious eye damage.

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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

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. 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

Conditions to avoid: Formation of aerosol. Use only in well-ventilated areas.

Advice on protection against fire and explosion

The product itself does not burn.

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.

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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
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 75 %; orthophosphoric acid							
Worker DNEL, long-term		inhalation	local	2,92 mg/m³			
Consumer DNEL, long-term		inhalation	local	0,73 mg/m³			

Additional advice on limit values

See chapter 7. No additional measures necessary.

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

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 proof.

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

Physical state: liquid Colour: green

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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 $^{\circ}$ C Flash point: > 150 $^{\circ}$ C

Explosive properties

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

Vapour pressure:

(at 20 °C)

not applicable

not determined

23 hPa

Vapour pressure: 123 hPa

(at 50 °C)

Density (at 20 °C):

Bulk density:

Not applicable

Water solubility:

miscible

(at 20 °C)

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 is >= 55mm per year at a test temperature of 6,25 °C

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 $^{\circ}$ C

10.5. Incompatible materials

Reacts with: Alkali (lye), Aluminium. Slowly corrodes aluminium and zink under hydrogen evolution.

10.6. Hazardous decomposition products

Carbon dioxide, Phosphorus oxides, Gases/vapours, irritant, Carbon monoxide.

Further information

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

SECTION 11: Toxicological information

according to Regulation (EC) No 1907/2006

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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.

CAS No	Chemical name					
	Exposure routes	Method	Dose	Species	Source	
7664-38-2	Phosphoric acid 75 %; orthophosph	oric acid				
	oral	LD50	2600 mg/kg	Rat		
	dermal	LD50	2740 mg/kg	Rabbit		
68439-51-0	PPG-4 Laureth-5					
	oral	LD50	> 2000 mg/kg	Ratte		
1643-20-5	Lauramine oxide					
	oral	LD50	> 2000 mg/kg	Rat	OECD 401	
	dermal	LD50	> 2000 mg/kg	Rat	OECD 402	

Irritation and corrosivity

Causes serious eye damage.

Sensitising effects

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

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.

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.

Specific effects in experiment on an animal

No data available

SECTION 12: Ecological information

12.1. Toxicity

Product is acid. The product needs to apply neutralizing agents before draining to wastewater treatment plants. Harmful to aquatic organisms. After neutralisation, reduction in toxic effects is observed.

according to Regulation (EC) No 1907/2006

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						3 3 3
CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
7664-38-2	Phosphoric acid 75 %; orthoph	osphoric aci	id			
	Acute fish toxicity	LC50	138 mg/l	96 h	Gambusia affinis	
68439-51-0	PPG-4 Laureth-5					
	Acute fish toxicity	LC50	> 1 - 10 mg/l	96 h	Poecilia reticulata (Guppy)	
	Acute algae toxicity	ErC50	> 1 - 10 mg/l	72 h	Desmodesmus subspicatus.	
	Acute crustacea toxicity	EC50	> 1 - 10 mg/l	48 h	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(> 10000) mg/l)		Pseudomonas putida	
1643-20-5	Lauramine oxide					
	Acute fish toxicity	LC50	1,26 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203
	Acute algae toxicity	ErC50	0,19 mg/l	72 h		
	Acute crustacea toxicity	EC50	2,9 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202
	Crustacea toxicity	NOEC	0,70 mg/l	21 d	Daphnia magna (Big water flea)	OECD 211

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. The surfactants contained in this preparation 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	PPG-4 Laureth-5				
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	> 60 %		28	
	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
1643-20-5	Lauramine oxide	< 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 components in this formulation do not meet the criteria for classification as PBT or vPvB.

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.

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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

Classified as 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

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 1805

14.2. UN proper shipping name: PHOSPHORIC ACID SOLUTION

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



Classification code: C1
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 1805

14.2. UN proper shipping name: PHOSPHORIC ACID SOLUTION

14.3. Transport hazard class(es):

14.4. Packing group:

Hazard label:

8



Classification code: C1 Limited quantity: 5 L

according to Regulation (EC) No 1907/2006

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Other applicable information (inland waterways transport)

F1

Marine transport (IMDG)

14.1. UN number: UN 1805

14.2. UN proper shipping name: PHOSPHORIC ACID SOLUTION

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



Marine pollutant: Special Provisions: 223

Limited quantity: 5 L EmS: F-A, S-B

Other applicable information (marine transport)

E1

Air transport (ICAO)

14.1. UN number: UN 1805

14.2. UN proper shipping name: PHOSPHORIC ACID SOLUTION

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

May be corrosive to metals.

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

not relevant

Other applicable information

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

SECTION 15: Regulatory information

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

according to Regulation (EC) No 1907/2006

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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): 2 - 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.
38	Irritating to skin.

41 Risk of serious damage to eyes.

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

H290	May be correctly to metals	•
11230	May be corrosive to metals	٥.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H401 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.)