according to Regulation (EC) No 1907/2006

ZE-KA-FIX

Print date: 27.04.2015 Product code: 350 Page 1 of 7

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

1.1. Product identifier

ZE-KA-FIX

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

Use of the substance/mixture

cleaning agent

1.3. Details of the supplier of the safety data sheet

Company name: Leyco Chemische Leyde GmbH

Street: Industriestraße 155
Place: D--50999 Köln

Telephone: +49 (0) 2236-966-00-0 Telefax: +49 (0) 2236-966-00-10

e-mail: sicherheit@leyde.com

Contact person: Abteilung Produktsicherheit Telephone: +49 (0) 2236-966-00-29

Internet: www.leyde.com

Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone 0049 (0) 2236 966 00 29

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: C - Corrosive

R phrases: Causes burns.

Causes burns. Irritating to eyes. Irritating to respiratory system. Irritating to skin.

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

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes severe skin burns and eye damage.

2.2. Label elements

Hazardous components which must be listed on the label

Phosphoric acid 100 %; orthophosphoric acid

Formic acid 100 %

Signal word: Danger Pictograms: GHS05



Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P314 Get medical advice/attention if you feel unwell.

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

according to Regulation (EC) No 1907/2006

ZE-KA-FIX

Print date: 27.04.2015 Product code: 350 Page 2 of 7

present and easy to do. Continue rinsing.

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

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

2.3. Other hazards

Causes burns.

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 100 %; orthophosphoric acid	> 50 %
7664-38-2	C - Corrosive R34	
015-011-00-6	Skin Corr. 1B; H314	
200-579-1	Formic acid 100 %	5-10 %
64-18-6	C - Corrosive R35	
607-001-00-0	Skin Corr. 1A; H314	
	Isotridecanolethoxylat	<5 %
24939-91-8	Xn - Harmful, Xi - Irritant R22-41	

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

Take off contaminated clothing and shoes immediately. Symptoms of poisoning may only appear several hours later. Keep under medical supervision for at least 48 hours.

After inhalation

Move to fresh air. Oxygen or artificial respiration if needed. Keep warm and in a quiet place. If symptoms persist, call a physician.

After contact with skin

Wash off with soap and plenty of water.

After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids. Consult a physician.

After ingestion

Call a physician immediately. Immediately give large quantities of water to drink. Move to fresh air.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

"Use dry chemical, CO2, water spray or ""alcohol"" foam."

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

according to Regulation (EC) No 1907/2006

ZE-KA-FIX

Print date: 27.04.2015 Product code: 350 Page 3 of 7

5.2. Special hazards arising from the substance or mixture

In the event of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. tightly fitting safety goggles Eye wash bottle with pure water

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Evacuate personnel to safe areas. (8)

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Dilute with water.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4. Reference to other sections

Ensure adequate ventilation. Soak up with inert absorbent material and dispose of as hazardous waste. Neutralise with lime milk or soda and flush with plenty of water.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry and well-ventilated place.

Advice on storage compatibility

See also section Storage class

Further information on storage conditions

Keep tightly closed.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
64-18-6	Formic acid	5	9.6		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

8.2. Exposure controls

Protective and hygiene measures

Keep away from food, drink and animal feeding stuffs. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. Avoid contact with the skin and the eyes.

according to Regulation (EC) No 1907/2006

ZE-KA-FIX

Print date: 27.04.2015 Product code: 350 Page 4 of 7

Eye/face protection

tightly fitting safety goggles

Hand protection

protective gloves: butylrubber PVC or other plastic material gloves (0,5 mm) Polyvinyl alcohol or nitrile-butyl rubber gloves (0,35 mm) Break through time > 8 h

Respiratory protection

Respirator with combination filter for vapour/particulate. In the case of vapour formation use a respirator with filter model ABEK P.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: green
Odour: characteristic

Test method

pH-Value (at 20 °C): < 1,0

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Plash point:

not determined

85 °C

85 °C

no data available

no data available

no data available

not applicable

Flammability not applicable

Explosive properties

acidic, liquid

Lower explosion limits:

Upper explosion limits:

not applicable

not applicable

Auto-ignition temperature not applicable

Decomposition temperature: not applicable
Vapour pressure: 23 hPa

(at 20 °C)

Vapour pressure: < 110 hPa

(at 50 °C)

Density (at 20 °C): 1.48 g/cm³ Water solubility: miscible

(at 20 °C)

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.2. Chemical stability

no data available

10.3. Possibility of hazardous reactions

according to Regulation (EC) No 1907/2006

ZE-KA-FIX

Print date: 27.04.2015 Product code: 350 Page 5 of 7

Decomposes by reaction with alkaline solutions.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

no data available

10.6. Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Irritation and corrosivity

corrosive effects

SECTION 12: Ecological information

12.1. Toxicity

Waterbezwaarlijkheid (Nederland): 11 Saneringsinspanning (Nederland): B

CAS No	Chemical name						
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source	
7664-38-2	Phosphoric acid 100 %; orthop	Phosphoric acid 100 %; orthophosphoric acid					
	Acute fish toxicity	LC50	138 mg/l	96 h	Gambusia affinis		
64-18-6	Formic acid 100 %						
	Acute fish toxicity	LC50	46 - 100 mg/l	96 h	Leuciscus idus	IUCLID	
	Acute algae toxicity	ErC50	27 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50	34,2 mg/l	48 h	Daphnia magna	IUCLID	

12.2. Persistence and degradability

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. 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 request or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-18-6	Formic acid 100 %	-0,54

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Solutions with low pH-value must be neutralised before discharge.

Waste disposal number of used product

070601 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps,

detergents, disinfectants and cosmetics; aqueous washing liquids and mother liquors

Classified as hazardous waste.

Contaminated packaging

Rinse empty containers with water and use the rinse-water to prepare the working solution.

according to Regulation (EC) No 1907/2006

ZE-KA-FIX

Print date: 27.04.2015 Product code: 350 Page 6 of 7

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:

Limited quantity:

Transport category:

Hazard No:

Tunnel restriction code:

C1

5 L

80

Tunnel restriction code:

Other applicable information (land transport)

E1 : 3

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):814.4. Packing group:IIIHazard label:8



Classification code: C1 Limited quantity: 5 L

Other applicable information (inland waterways transport)

E1

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



Special Provisions: 223
Limited quantity: 5 L
EmS: F-A, S-B

according to Regulation (EC) No 1907/2006

ZE-KA-FIX

Product code: 350 Print date: 27.04.2015 Page 7 of 7

Other applicable information (marine transport)

: 223 E1

Air transport (ICAO)

14.1. UN number: **UN 1805**

PHOSPHORIC ACID SOLUTION 14.2. UN proper shipping name:

14.3. Transport hazard class(es): Ш 14.4. Packing group: Hazard label: 8



Special Provisions:

Limited quantity Passenger:

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

Other applicable information (air transport)

E1 : Y841 60 L : A3

SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

Additional information

Waterbezwaarlijkheid (Nederland): 11 Saneringsinspanning (Nederland): B

SECTION 16: Other information

Relevant R-phrases (Number and full text)

22 Harmful if swallowed.

Causes burns. 34

35 Causes severe burns.

41 Risk of serious damage to eyes.

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

H314 Causes severe skin burns and eye damage.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)