

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## Cleamen 442 Machine Floors Acid

Date of issue: 26. 11. 2012

Version: 4.0

Date of revision: 05. 02. 2019

Replaced version from: 11. 11. 2015

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

#### 1.1 Product identifier

**Product Name**

**Cleamen 442 Machine Floors Acid**

**Product code**

VC442XXXX98-CLP

**Mixture description**

An aqueous solution of inorganic acids, surfactant, propylene glycol, perfume and dyes.

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

**Identified uses**

Liquid concentrated, non-foaming, acidic detergent which is intended primarily for hand and machine cleaning surfaces.

Only for professional users.

**Uses advised against**

Do not use on materials containing lime or other non-acidic materials such as marble, travertine, granite, etc. Do not use in combination with chlorine-based products, free chlorine (dangerous gas) may be released. Do not use on wooden and veneered furniture. The formulation may cause slight clumping of the joint after application.

It is recommended to use it only for the intended use. Other uses may expose users to unpredictable risks.

#### 1.3 Details of the supplier of the safety data sheet

**CORMEN s.r.o.**

Průmyslová 1420

593 01 Bystřice nad Pernštejnem

Czech Republic

Tel.: +420 566 550 961

Fax: +420 566 551 822

e-mail address for a competent person responsible for the SDS: [info@cormen.cz](mailto:info@cormen.cz)

#### 1.4 Emergency telephone number

112 (General emergency phone), 998 (fire brigade), 999 (ambulance service).

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

The mixture is classified as **dangerous** according to regulation 1272/2008/EC.

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### Classification according to 1272/2008/EC

Met. Corr. 1; H290

Skin Corr. 1B; H314

Eye Dam. 1; H318

Full text of classifications and H-phrases: see section 16.

### The most important adverse physicochemical, human health and environmental effects

May be corrosive to metals. Causes severe skin burns and eye damage.

## 2.2 Label elements

### Hazard pictograms



### Signal word

Danger

### Components of the mixture to be placed on the label

Contain: Phosphoric acid, Alcohols, C10-12, ethoxylated propoxylated, Hydrochloric acid

### Hazard statements

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

### Precautionary statements

P234 - Keep only in original packaging.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### Supplemental hazard information

Mandatory additional information is not required according to CLP regulation.

Composition:  $\geq 30\%$  water, 5 -  $< 15\%$  non-ionic surfactants, phosphoric acid, sulphamidic acid,  $< 5\%$  propylene glycol, hydrochloric acid, perfume, coloring agent.

## 2.3 Other hazards

Mixture or its components are not classified as PBT or vPvB, not the date of issue of the safety data sheet kept on the candidate list for Annex XIV of the REACH Regulation.

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### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

An aqueous solution of inorganic acids, surfactant, propylene glycol, perfume and dyes.

#### 3.2.1 Components of a mixture classified as hazardous

Identification of substance		Content wt. %	Classification according to 1272/2008/EC
<b>Phosphoric acid; Orthophosphoric acid</b>			
CAS Number	7664-38-2	< 11	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318
EC Number	231-633-2		
Index Number	015-011-00-6		
Registration Number	01-2119485924-24-XXXX		
The substance has specific concentration limits: C ≥ 25 %: Skin Corr. 1B; H314, 10 % ≤ C < 25 %: Skin Irrit. 2; H315, 10 % ≤ C < 25 %: Eye Irrit. 2; H319			
<b>Alcohols, C10-12, ethoxylated propoxylated</b>			
CAS Number	68154-97-2	≤ 10	Acute Tox. 4; H302 Eye Dam. 1; H318
EC Number	614-340-8		
Index Number	not given		
Registration Number	is not subject to registration, it is a polymer		
<b>Sulphamidic acid; Sulphamic acid; Sulfamic acid</b>			
CAS Number	5329-14-6	≤ 8	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412
EC Number	226-218-8		
Index Number	016-026-00-0		
Registration Number	01-2119488633-28-XXXX		
<b>Hydrochloric acid</b>			
CAS Number	7647-01-0	< 1	Met. Corr. 1; H290 Skin Corr. 1B; H314 STOT SE 3; H335
EC Number	231-595-7		
Index Number	017-002-01-X		
Registration Number	01-2119484862-27-XXXX		
The substance has specific concentration limits: C ≥ 25 %: Skin Corr. 1B; H314, 10 % ≤ C < 25 %: Skin Irrit. 2; H315, 10 % ≤ C < 25 %: Eye Irrit. 2; H319, C ≥ 10 %: STOT SE 3; H335, C ≥ 0.1 %: Met. Corr. 1; H290			

Full text of classifications and H-phrases: see section 16.

### SECTION 4: First aid measures

In all cases keep the victim at physical and mental rest and warm. In case of doubt or if symptoms persist, seek medical attention. An unconscious person never give anything. Protect yourself during rescue work.

#### 4.1 Description of first aid measures

##### Inhalation

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Interrupt the exposure, transfer the person to the fresh air. In case of persistent nausea, seek medical advice.

### **Skin contact**

Remove contaminated clothing, shoes, and wash thoroughly with water (preferably lukewarm) and soap. Do not use solvents or thinners. Seek medical advice.

### **Eye contact**

Rinse with a gentle stream of water for at least 15 minutes. Keep your eyelids wide open with your thumb and forefinger. If the affected person is wearing contact lenses, remove them before rinsing eyes if it is easy. Seek medical advice.

### **Ingestion**

Rinse your mouth and then drink plenty of water. Do not induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Seek medical advice.

### **4.2 Most important symptoms and effects, both acute and delayed**

Are not known.

### **4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

##### Small fire:

Carbon dioxide CO<sub>2</sub>, dry extinguishing agent, sand or earth, foam.

##### Extensive fire:

Fragmented water streams (water mist), foam.

#### **Unsuitable extinguishing media**

Solid streams of water may be ineffective.

### **5.2 Special hazards arising from the substance or mixture**

In case of fire extinguishing prevent leakage of water and rest of product into drains. Collect them separately and dispose of safely in accordance with current legislation and applicable local regulations.

In case of fires, hazardous combustion gases are formed: carbon oxides, phosphor oxides, phosphine, sulphur oxides, hydrogen sulphide, ammonia, nitrogen oxides, chlorine, chlorine oxides, hydrogen chloride and products of incomplete combustion.

### **5.3 Advice for firefighters**

Stop further leakage of product if possible. Spilled product, which does not burn, cover with sand or foam. Move containers and barrels away from the fire to a safe place, if possible. Cool all affected containers down with flooding quantities of water. If the fire can't be extinguished - evacuate the premises.

In case of fire, wear suitable respiratory protective equipment and fire-fighting suit.

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes, use suitable protective equipment and clothing, see Section 8. Ensure adequate ventilation. Avoid formation of mist and vapour. At the point of leakage, prevent the movement of unauthorized persons.

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### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. If this cannot be avoided, inform the competent authorities (police and firefighters) immediately.

### 6.3 Methods and material for containment and cleaning up

According to the amount of spilled liquid, drain away the substance (large spillage) or in case of small spillage, absorb it with suitable absorbent (vermiculite, dry sand), put into labelled closed containers and dispose of them accordingly to Section 13. Flush residues with water and collect it for waste disposal. Do not use solvents or dispersants unless instructed by an expert or government authority.

If container is damaged, remove the content to the new undamaged container and label it properly again.

### 6.4 Reference to other sections

Refer also to the provisions of sections 7, 8 and 13 of this safety data sheet.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Personal protection see Section 8. Ensure good ventilation to prevent formation of mist and vapour.

Smoking, eating and drinking should be prohibited at the place of use. In place of use should be forbidden to smoke, eat or drink. Do not use dirty clothing. After work wash yourself carefully with warm water and soap, take a shower. Use protective cream.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in original, tightly closed containers, in a dry, cool and well-ventilated place at room temperature. Protect from frost.

### 7.3 Specific end use(s)

Liquid agent designed for diluting on surfaces resistant to acids such as ceramic, graphite, and plastic surfaces. It is suitable for after building cleaning, and efficient for cement residues, sediments after painting, cement stains, rust, limescale or urine sediments.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 8.1.1 Exposure limit value

**Phosphoric acid** CAS: 7664-38-2

Limit values - Eight hours	Limit values - Short-term	Note
1 mg/m <sup>3</sup> - ppm	2 mg/m <sup>3</sup> - ppm	-

**Hydrochloric acid - hydrogen chlorine** CAS: 7647-01-0

Limit values - Eight hours	Limit values - Short-term	Note
8 mg/m <sup>3</sup> 5 ppm	15 mg/m <sup>3</sup> 10 ppm	-

#### 8.1.2 Biological limit values

Not are determined in EU

#### 8.1.4 DNEL and PNEC values

**Phosphoric acid** CAS: 7664-38-2

DNEL

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Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	10.7 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Long term	1 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Acute/short term	2 mg/m <sup>3</sup>
General population	Inhalation	Systemic effect	Long term	4.57 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Long term	0.36 mg/m <sup>3</sup>
General population	Oral	Systemic effect	Long term	0.1 mg/kg/den

**PNEC** - not yet available

### Sulphamidic acid

CAS: 5329-14-6

#### DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	70.5 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	10 mg/kg/den
General population	Inhalation	Systemic effect	Long term	17.4 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	5 mg/kg/den
General population	Oral	Systemic effect	Long term	5 mg/kg/den

#### PNEC

Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
1.8 mg/l	0.18 mg/l	0.48 mg/l	not given	5 mg/l

#### PNEC

Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
8.36 mg/l	0.84 mg/kg	no effect	5 mg/kg	no effect

### Hydrochloric acid

CAS: 7647-01-0

#### DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Local effect	Long term	8 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Acute/short term	15 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Long term	8 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Acute/short term	15 mg/m <sup>3</sup>

**PNEC** - not yet available

## 8.2 Exposure controls

### 8.2.1 Workers exposure controls

Use only in well-ventilated areas.

Observe usual safety precautions for working with chemicals. The degree of effectiveness of personal protective equipment depends on temperature and ventilation levels.

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### 8.2.2 Individual protection measures, such as personal protective equipment

Do not eat, drink or smoke. After work, wash thoroughly with warm water and soap and take a shower. Use protective cream. Do not soiled protective equipment to wash, do not use solvents.

#### Respiratory protection

Not necessary in case of compliance concentration limits (if they were exceeded, use a respirator against organic vapour). In the event of an accident or a fire use self-contained breathing apparatus.

#### Hand protection

Chemically resistant protective gloves. As there are no tests, it is not possible to recommend the glove material for this mixture. The selection of the glove material on consideration of the breakthrough time, permeability and degradation.

#### Eye/face protection

Wear safety goggles or face shield.

#### Skin protection

Suitable protective working clothing and footwear.

### 8.2.3 Environmental exposure controls

Uncontrolled release of the mixture into environment is to be avoided. Observe the emission limits.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	liquid
<b>Colour</b>	pink
<b>Odour</b>	characteristic
<b>Odour threshold</b>	not determined
<b>pH</b>	1.2
<b>Melting point/freezing point</b>	not determined
<b>Initial boiling point and boiling range</b>	100 C
<b>Flash point</b>	> 100 C
<b>Evaporation rate</b>	not determined
<b>Flammability (solid, gas)</b>	not determined
<b>Lower flammability or explosive limits</b>	not determined not determined
<b>Upper flammability or explosive limits</b>	not determined
<b>Vapour pressure</b>	23 hPa
<b>Vapour density</b>	not determined
<b>Relative density</b>	1.183 (water = 1)
<b>Solubility in water</b>	miscible
<b>Solubility in organic solvents</b>	not determined
<b>Partition coefficient: n-octanol/water</b>	not determined
<b>Auto-ignition temperature</b>	371 C

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<b>Decomposition temperature</b>	not determined
<b>Viscosity</b>	not determined
<b>Explosive properties</b>	is not classified as explosive
<b>Oxidising properties</b>	is not classified as an oxidant

### 9.2 Other information

<b>Organic solvents</b>	5.0 %
<b>Water</b>	60.3 %
<b>VOC</b>	5.00 %
<b>Solids content</b>	8.0 %

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The mixture is stable under normal conditions of use. Dangerous reactions do not occur.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Not known.

### 10.4 Conditions to avoid

Protect from frost.

### 10.5 Incompatible materials

Strong base, strong oxidizing agent.

### 10.6 Hazardous decomposition products

Burning releases carbon oxides, phosphor oxides, phosphine, sulphur oxides, hydrogen sulphide, ammonia, nitrogen oxides, chlorine, chlorine oxides, hydrogen chloride and products of incomplete combustion.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Mixture

#### Acute toxicity

<b>Oral</b>	data for the mixture are not available the mixture is not classified by the additive formula ATE <sub>mixture</sub> > 3 077 mg/kg
<b>Dermal</b>	data for the mixture are not available the mixture does not contain substances classified as an acute toxicity by dermal route of exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3

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**Inhalation** data for the mixture are not available  
the mixture does not contain substances classified as an acute toxicity by inhalation route of exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3

### **Skin corrosion/irritation**

data for the mixture are not available  
the mixture is classified as corrosive for skin in category 1B based on value pH and inorganic acids content together with surfactant

### **Serious eye damage/irritation**

data for the mixture are not available  
the mixture is classified as causes serious eye damage based on the general/specific concentration limits of substance(s), value pH and inorganic acids content together with surfactant

### **Respiratory or skin sensitisation**

data for the mixture are not available  
the mixture does not contain substances classified as sensitizing or the concentration of substance(s) is lower than the limit for inclusion in Section 3

### **Germ cell mutagenicity**

data for the mixture are not available  
the mixture does not contain substances classified as mutagenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3

### **Carcinogenicity**

data for the mixture are not available  
the mixture does not contain substances classified as carcinogenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3

### **Reproductive toxicity**

data for the mixture are not available  
the mixture does not contain substances classified as toxic for reproduction or the concentration of substance(s) is lower than the limit for inclusion in Section 3

### **Specific target organ toxicity – single exposure**

data for the mixture are not available  
the mixture is not classified as toxic for specific target organs in a single exposure according to the general/specific concentration limits of substance(s)

### **Specific target organ toxicity – repeated exposure**

data for the mixture are not available  
the mixture does not contain substances classified as toxic for specific target organs in a repeated exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3

### **Aspiration hazard**

data for the mixture are not available  
the mixture does not contain substances classified as aspiration hazard or the concentration of substance(s) is lower than the limit for inclusion in Section 3

### **Other information**

See section 2 and 4.

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<b>Phosphoric acid</b>	CAS: 7664-38-2
<b>Acute toxicity</b>	
<b>Oral</b>	the substance is classified in category 4 the LD <sub>50</sub> for a 10% solution of 75.4% thermal phosphoric acid in rats was determined to be 1.70 ml/100 g body weight (approximately 2600 mg/kg bw) ATE = 500 mg/kg (for calculation by additive formula)
<b>Dermal</b>	based on available data, the classification criteria are not met LD <sub>50</sub> > 2 000 mg/kg (rabbit, no death, 85% phosphoric acid)
<b>Inhalation</b>	data for the substance are not available
<b>Skin corrosion/irritation</b>	
classified as skin corrosive category 1B - mean erythema score = 4 and oedema = 2.2 (not fully reversible, 80% phosphoric acid, rabbit)	
<b>Serious eye damage/irritation</b>	
classified as serious eye damage	
<b>Respiratory or skin sensitisation</b>	
data for the substance are not available	
<b>Germ cell mutagenicity</b>	
based on available data, the classification criteria are not met negative (OECD 471, OECD 473, OECD 476)	
<b>Carcinogenicity</b>	
data for the substance are not available	
<b>Reproductive toxicity</b>	
based on available data, the classification criteria are not met NOAEL ≥ 500 mg/kg/day (fertility, rat, oral, generation P0, OECD 422) NOAEL ≥ 500 mg/kg/day (rat, oral, generation F1, OECD 422)	
<b>Specific target organ toxicity – single exposure</b>	
data for the substance are not available	
<b>Specific target organ toxicity – repeated exposure</b>	
based on available data, the classification criteria are not met LOAEL = 155 mg/kg/day (nephrocalcinosis, rat, oral)	
<b>Aspiration hazard</b>	
the substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm <sup>2</sup> /s or less at 40 °C	
<b>Alcohols, C10-12, ethoxylated propoxylated</b>	CAS: 68154-97-2
<b>Acute toxicity</b>	
<b>Oral</b>	the substance is classified in category 4 LD <sub>50</sub> = 950 mg/kg (rat)
<b>Dermal</b>	data for the substance are not available
<b>Inhalation</b>	data for the substance are not available

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<b>Skin corrosion/irritation</b>	
data for the substance are not available	
<b>Serious eye damage/irritation</b>	
data for the substance are not available	
<b>Respiratory or skin sensitisation</b>	
data for the substance are not available	
<b>Germ cell mutagenicity</b>	
data for the substance are not available	
<b>Carcinogenicity</b>	
data for the substance are not available	
<b>Reproductive toxicity</b>	
data for the substance are not available	
<b>Specific target organ toxicity – single exposure</b>	
data for the substance are not available	
<b>Specific target organ toxicity – repeated exposure</b>	
data for the substance are not available	
<b>Aspiration hazard</b>	
the substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm <sup>2</sup> /s or less at 40 °C	
<b>Sulphamidic acid</b>	CAS: 5329-14-6
<b>Acute toxicity</b>	
<b>Oral</b>	based on available data, the classification criteria are not met LD <sub>50</sub> = 2 065 mg/kg (rat)
<b>Dermal</b>	based on available data, the classification criteria are not met LD <sub>50</sub> > 2 000 mg/kg (rat)
<b>Inhalation</b>	data for the substance are not available
<b>Skin corrosion/irritation</b>	
substance classified as irritating to skin according to harmonized classification mean erythema score = 0 (rabbit, EU method B.4) primary dermal irritation index PDII = 2.6 (max. 10, intact skin), mean erythema score ≥ 1 - ≤ 2 (moderate erythema on intact skin), mean oedema score = ca. 1 (moderate erythema on intact skin) (rabbit, 72 h, OECD 404)	
<b>Serious eye damage/irritation</b>	
classified as eye irritant, mean corneal opacity = 1 (fully reversible), iritis = 1 (fully reversible), conjunctival oedema = 1 (fully reversible) (rabbit, 72 h, OECD 405)	
<b>Respiratory or skin sensitisation</b>	
data for the substance are not available	
<b>Germ cell mutagenicity</b>	

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based on available data, the classification criteria are not met  
negative (OECD 471, OECD 476, OECD 487)

### **Carcinogenicity**

data for the substance are not available

### **Reproductive toxicity**

based on available data, the classification criteria are not met

NOAEL > 50 mg/kg/day (rat, oral, clinical signs, mortality, body weight and weight gain, food consumption and compound intake, water consumption and compound intake, gross pathology, reproductive performance, P0 generation, EPA OPP 83-4)

NOAEL = 500 mg/kg/day (rat, oral, viability, sexual maturation, clinical signs, mortality, body weight and weight gain, food consumption and compound intake, water consumption and compound intake, organ weights and organ/body weight ratios, gross pathology, histopathology, F1 generation, EPA 83 -4)

NOAEL = 500 mg/kg/day (rat, oral, viability, sexual maturation, clinical signs, mortality, body weight and weight gain, food consumption and compound intake, water consumption and compound intake, organ weights and organ/body weight ratios, gross pathology, histopathology, F2a generation, EPA OPP 83-4)

NOAEL = 500 mg/kg/day (rat, oral, viability, sexual maturation, clinical signs, mortality, body weight and weight gain, food consumption and compound intake, water consumption and compound intake, organ weights and organ/body weight ratios, gross pathology, histopathology, F2b generation, EPA OPP 83-4)

### **Specific target organ toxicity – single exposure**

data for the substance are not available

### **Specific target organ toxicity – repeated exposure**

based on available data, the classification criteria are not met

NOAEL = 929 mg/kg/day (rat, male, oral, 90 days, OECD 408)

NOAEL = 1 004 mg/kg/day (rat, female, oral, 90 days, OECD 408)

### **Aspiration hazard**

the substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C

**Hydrochloric acid**

CAS: 7647-01-0

### **Acute toxicity**

**Oral** data for the substance are not available

**Dermal** data for the substance are not available

**Inhalation** based on available data, the classification criteria are not met

LC<sub>50</sub> = 40 989 ppm (HCl gas, male, 5 min.)

LC<sub>50</sub> = 4 701 ppm (HCl gas, male, 30 min.)

LC<sub>50</sub> = 45.6 ppm (aerosol, male, 5 min.)

LC<sub>50</sub> = 8.3 ppm (aerosol, male, 30 min.)

### **Skin corrosion/irritation**

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classified as skin corrosive category 1B

not skin corrosive - tissue viability = 93.3% (10% solution, exposure: 3 minutes, human skin model, OECD 431)

skin corrosive - tissue viability = 27.6%, 5.4% (10% solution, exposure: 60, 240 minutes, human skin model, OECD 431)

skin corrosive - tissue viability = 30.4%, 6.5%, 6% (25% solution, exposure: 3, 60, 240 minutes, human skin model, OECD 431)

skin corrosive - tissue viability = 9.5%, 4.1%, 6.6% (30% solution, exposure: 3, 60, 240 minutes, human skin model, OECD 431)

not skin irritant - tissue viability = 106.8%, 99.7%, 82%, 101% (1, 3, 10, 15% solution, human skin model, OECD 439)

positive result - tissue viability = 41.1%, 32.2%, 82%, 101% (17.5, 25% solution, human skin model, OECD 439)

### **Serious eye damage/irritation**

classified as serious eye damage

### **Respiratory or skin sensitisation**

based on available data, the classification criteria are not met

not skin sensitising (guinea pig, OECD 406)

### **Germ cell mutagenicity**

based on available data, the classification criteria are not met

negative (mitotic recombination assay with *Saccharomyces cerevisiae*, mammalian chromosome aberration test)

positive (mammalian cell gene mutation assay)

### **Carcinogenicity**

based on available data, the classification criteria are not met

NOAEL < 10 ppm (HCl gas, rat, male)

### **Reproductive toxicity**

based on available data, the classification criteria are not met

NOAEL = 853 mg/kg/day (rat, oral, generation P0, OECD 415)

### **Specific target organ toxicity – single exposure**

the substance may cause respiratory irritation

### **Specific target organ toxicity – repeated exposure**

based on available data, the classification criteria are not met

NOAEL = 20 ppm (mortality, clinical signs, food consumption, body weight and organ weight, rat, inhalation, HCl gas, OECD 413)

LOAEL = 50 ppm (mortality, clinical signs, food consumption, body weight and organ weight, rat, inhalation, HCl gas, OECD 413)

### **Aspiration hazard**

the substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C

## SECTION 12: Ecological information

### 12.1 Toxicity

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according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## Cleamen 442 Machine Floors Acid

<b>Mixture</b>	
<b>Fish</b>	
data for the mixture are not available	
<b>Crustaceans</b>	
data for the mixture are not available	
<b>Algae</b>	
data for the mixture are not available	
<b>Phosphoric acid</b>	CAS: 7664-38-2
the substance is not classified as dangerous for the aquatic environment	
<b>Fish</b>	
mean lethal pH, 96 hrs., <i>Leopomis macrochirus</i> : pH = 3 - 3.25	
<b>Crustaceans</b>	
EC <sub>50</sub> , 48 hrs., <i>Daphnia Magna</i> : > 100 mg/l (immobility) NOEC, 48 hrs., <i>Daphnia Magna</i> : 56 mg/l (immobility)	
<b>Algae</b>	
EC <sub>50</sub> , 72 hrs., <i>Desmodesmus subspicatus</i> : > 100 mg/l (growth rate) NOEC, 72 hrs, <i>Desmodesmus subspicatus</i> : 100 mg/l (growth rate)	
<b>Alcohols, C10-12, ethoxylated propoxylated</b>	CAS: 68154-97-2
the substance is not classified as dangerous for the aquatic environment	
<b>Fish</b>	
data for the substance are not available	
<b>Crustaceans</b>	
EC <sub>50</sub> , 48 hrs., <i>Daphnia Magna</i> : 12 mg/l	
<b>Algae</b>	
data for the substance are not available	
<b>Sulphamidic acid</b>	CAS: 5329-14-6
the substance is classified as Aquatic Chronic 3; H412	
<b>Fish</b>	
LC <sub>50</sub> , 96 hrs., <i>Pimephales promelas</i> : 70.3 mg/l (mortality) NOEC, 34 d., <i>Danio rerio</i> : ≥ 60 mg/l (number of hatching, mortality, weight, length)	
<b>Crustaceans</b>	
EC <sub>50</sub> , 48 hrs., <i>Daphnia Magna</i> : 71.6 mg/l (mobility) NOEC, 21 d., <i>Daphnia Magna</i> : 19 mg/l (reproduction) LOEC, 21 d., <i>Daphnia Magna</i> : 34 mg/l (reproduction)	
<b>Algae</b>	

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EC<sub>50</sub>, 72 hrs., *Desmodesmus subspicatus*: 48 mg/l (growth rate)  
EC<sub>50</sub>, 72 hrs., *Desmodesmus subspicatus*: 33.8 mg/l (biomass)  
EC<sub>10</sub>, 72 hrs., *Desmodesmus subspicatus*: 29.5 mg/l (growth rate)  
EC<sub>10</sub>, 72 hrs., *Desmodesmus subspicatus*: 13.3 mg/l (biomass)  
NOEC, 72 hrs., *Desmodesmus subspicatus*: 18 mg/l (growth rate)  
NOEC, 72 hrs., *Desmodesmus subspicatus*: 18 mg/l (biomass)

### Hydrochloric acid

CAS: 7647-01-0

the substance is not classified as dangerous for the aquatic environment

#### **Fish**

LC<sub>0</sub>, 96 hrs., *Lepomis macrochirus*: pH = 3.5 (mortality)  
LC<sub>50</sub>, 96 hrs., *Lepomis macrochirus*: pH = 3.25 - 3.5 (mortality)  
LC<sub>100</sub>, 96 hrs., *Lepomis macrochirus*: pH = 3 (mortality)

#### **Crustaceans**

EC<sub>50</sub>, 48 hrs., *Daphnia Magna*: pH = 4.92 (mobility)  
NOEC, 48 hrs., *Daphnia Magna*: pH = 5.5 (mobility)  
LOEC, 48 hrs., *Daphnia Magna*: pH = 5 (mobility)

#### **Algae**

EC<sub>50</sub>, 72 hrs., *Chlorella vulgaris*: pH = 4.7 (growth rate)  
EC<sub>50</sub>, 72 hrs., *Chlorella vulgaris*: pH = 4.82 (biomass)  
NOEC, 72 hrs., *Chlorella vulgaris*: pH = 5 (growth rate)

## 12.2 Persistence and degradability

### **Mixture**

data for the mixture are not available

The surfactants contained in this preparation in accordance with the biodegradability criteria according to Regulation (EC) No. 648/2004 on detergents.

### Phosphoric acid

CAS: 7664-38-2

not determined, it is an inorganic substance

### Alcohols, C10-12, ethoxylated propoxylated

CAS: 68154-97-2

readily biodegradable: 93 % after 28 days (removal of dissolved organic carbon, OECD 302)

### Sulphamidic acid

CAS: 5329-14-6

not determined, it is an inorganic substance

### Hydrochloric acid

CAS: 7647-01-0

not determined, it is an inorganic substance

## 12.3 Bioaccumulative potential

### **Mixture**

data for the mixture are not available

### Phosphoric acid

CAS: 7664-38-2

not determined, it is an inorganic substance

### Sulphamidic acid

CAS: 5329-14-6

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## Cleamen 442 Machine Floors Acid

not determined, it is an inorganic substance	
<b>Hydrochloric acid</b>	CAS: 7647-01-0
not determined, it is an inorganic substance	
<b>12.4 Mobility in soil</b>	
<b>Mixture</b>	
data for the mixture are not available	
<b>Phosphoric acid</b>	CAS: 7664-38-2
not determined, it is an inorganic substance	
<b>Sulphamidic acid</b>	CAS: 5329-14-6
not determined, it is an inorganic substance	
<b>Hydrochloric acid</b>	CAS: 7647-01-0
not determined, it is an inorganic substance	
<b>12.5 Results of PBT and vPvB assessment</b>	
Mixture or its components are not classified as PBT or vPvB, not the date of issue of the safety data sheet kept on the candidate list for Annex XIV of the REACH Regulation.	
<b>12.6 Other adverse effects</b>	
data are not available	
<b>SECTION 13: Disposal considerations</b>	
<b>13.1 Waste treatment methods</b>	
<b>Disposal methods of the substance or mixture and the contaminated packaging</b>	
Delete according to the applicable European and local regulations (eg. in a hazardous waste incinerator). <b>Never remove flushing into sewer!</b> Do not contaminate ponds or ditches with chemical or used container. Residual amounts and solutions to a licensed disposal company. For classifying the waste and the removal of waste producer responsibility.	
<b>Possible waste code</b>	
07 06 01* - aqueous washing liquids and mother liquors (mixture), 15 01 10* - packaging containing residues of or contaminated by dangerous substances (contaminated packaging), 15 01 02 - plastic packaging (clear packaging)	
<b>Physical/chemical properties that may affect waste treatment options</b>	
Metal corrosion.	
<b>Special precautions recommended for waste management</b>	
None known.	
<b>Waste legislation</b>	
Directive 2008/98/EC	
<b>SECTION 14: Transport information</b>	
<b>14.1 UN number</b>	
3264	

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## Cleamen 442 Machine Floors Acid

### 14.2 UN proper shipping name

ADR/RID/IMDG/IATA CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
(Phosphoric acid, Hydrochloric acid)

### 14.3 Transport hazard class(es)

8

### 14.4 Packing group

II

### 14.5 Environmental hazards

it is not dangerous for the environment during transport

### 14.6 Special precautions for user

not given

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

not available

### 14.8 Other information

#### Labeling according to ADR



#### Additional data for ADR/RID

classification code	C1
labels	8
hazard identification code	80
tunnel restriction code	E (ADR), - (RID)
limited quantities	1 l
excepted quantities	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
transport category	2

#### Additional data for IMDG

Emergency Schedules (EmS)	F-A/S-B
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## SECTION 15: Regulatory information

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

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## Cleamen 442 Machine Floors Acid

Regulation No. 1907/2006/ES, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, as subsequently amended (REACH)

Regulation No. 1272/2008/ES, on Classification, Labelling and Packaging of substances and mixtures, as subsequently amended (CLP)

### 15.2 Chemical safety assessment

No data available

## SECTION 16: Other information

### Reason for the revision of the safety data sheet

Change in the classification and labeling of the mixture in section 2, change of composition in section 3 and related changes in the other sections of the safety data sheet.

### Key or legend to abbreviations and acronyms

Acute Tox. 4	Acute toxicity, cat. 4
Aquatic Chronic 3	Chronic aquatic hazard, cat. 3
Eye Dam. 1	Serious eye damage, cat. 1
Eye Irrit. 2	Eye irritation, cat. 2
Met. Corr. 1	Substance or mixture corrosive to metals, cat. 1
Skin Corr. 1B	Skin corrosion, cat. 1B
Skin Irrit. 2	Skin irritation, cat. 2
STOT SE 3	Specific target organ toxicity - single exposure, cat. 3
ADR	Accord Dangereuses Route
CLP	Regulation No. 1272/2008/EC
DNEL	Derived No Effect Level
ICAO/IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent, bioaccumulative, toxic substance
PNEC	Predicted No Effect Concentration
REACH	Regulation No. 1907/2006/EC
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
VOC	Volatile organic compound
vPvB	Very persistent and very bioaccumulative substance

### Sources of key data used to compile the Safety Data Sheet

European legislation, manufacturer's safety data sheet, registration dossier of substances.

### List of H- and P- phrases

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.

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## Cleamen 442 Machine Floors Acid

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
P234	Keep only in original packaging.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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.
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### **Training advice**

According to MSDS.

### **Other information**

The mixture is classified using calculation methods according to Regulation CLP and tests. Use only for the purposes designated by the manufacturer, will prevent health and environmental risks.

The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

The safety data sheet was created by company LACHEPRA s.r.o.