SAFETY DATA SHEET

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

CLEAMEN GASTRO PROFESSIONAL GP 12

Date of issue: **19. 11. 2026** Version: **1.0**

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

1.1. Product identifier

Product Name

CLEAMEN GASTRO PROFESSIONAL GP 12

UFI code

UFI: 8K01-K0PK-K00S-G94Q

Product code

TCGOT.R03a

Mixture description

Aqueous solution.

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

Identified uses

The liquid acidic agent is intended for decalcification of stainless steel surfaces and technologies.
Professional use.

Uses advised against

Not to be used for calcite surfaces, shiny and artificial stone, shiny tiling, wood, laminate and materials non-resistant to acid.
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

Registered office:
CORMEN s.r.o.
Věchnov 73
593 01
Czech Republic
Tel.: +420 566 550 961
Fax: +420 566 551 822

Trade establishment:
CORMEN s.r.o.
Průmyslová 1420
593 01 Bystřice nad Pernštejnem
Czech Republic
Tel.: +420 565 400 300

e-mail address for a competent person responsible for the SDS: info@cormen.cz

1.4. Emergency telephone number

112 (General emergency phone).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Classification according to 1272/2008/EC

Met. Corr. 1; H290
Acute Tox. 4; H302
Skin Corr. 1B; H314
Eye Dam. 1; H318

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

The most important adverse physical, human health and environmental effects

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

2.2. Label elements

Hazard pictograms



Signal word

Danger

Substances of the mixture to be placed on the label

Contain Phosphoric acid, Etidronic acid.

Hazard statements

H290	May be corrosive to metals.
H302	Harmful if swallowed.
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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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. **Dispose of the cleaned packaging without any residual product content in the sorted waste.**

Supplemental hazard information

Mandatory additional information is not required according to CLP regulation.
Composition according to regulation 648/2004/EC on detergents: < 5% phosphonates.

2.3. Other hazards

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH regulation., Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

3.2.1. Substances of a mixture classified as hazardous

Identification of substance		Content wt. %	Classification according to 1272/2008/EC
Phosphoric acid; Orthophosphoric acid			
CAS Number	7664-38-2	50 - < 70	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 ATE_{oral} = 500 mg/kg bw
EC Number	231-633-2		
Index Number	015-011-00-6		
Registration Number	01-2119485924-24-XXXX		
The substance has specific concentration limits:			
Met. Corr. 1; H290	C > 20 %		
Skin Corr. 1B; H314	C ≥ 25 %		
Skin Irrit. 2; H315	10 % ≤ C < 25 %		
Eye Irrit. 2; H319	10 % ≤ C < 25 %		
Etidronic acid			
CAS Number	2809-21-4	1 - < 10	Met. Corr. 1; H290 Acute Tox. 4; H302 Eye Dam. 1; H318 ATE_{oral} = 1 878 mg/kg bw
EC Number	220-552-8		
Index Number	not given		
Registration Number	01-2119510391-53-XXXX		

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. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing. Protect yourself during rescue work.

4.1. Description of first aid measures

Inhalation

Interrupt the exposure, move 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 and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Small fire:

Carbon dioxide CO_2, dry extinguishing agent, sand or earth, alcohol-resistant foam.

Extensive fire:

Fragmented water streams (water mist), alcohol-resistant 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 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 vapour and aerosol. At the point of leakage, prevent the movement of unauthorized persons.

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 vapor and aerosol.

Smoking, eating and drinking should be prohibited at the place of use. Keep safety regulations for handling chemicals. Take off contaminated clothing and protective equipment before entering the dining area. 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.

Do not store together with incompatible materials (see subsection 10.5), food, drink and feed.

7.3. Specific end use(s)

See subsection 1.2.

SECTION 8: Exposure controls/personal protectio

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/m³	- ppm	2 mg/m³	- ppm	-

8.1.2. Biological limit values

Not determined in EU.

8.1.3. DNEL and PNEC values

Phosphoric acid CAS: 7664-38-2

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	10.7 mg/m³
Workers	Inhalation	Local effect	Long term	1 mg/m³
Workers	Inhalation	Local effect	Acute/short term	2 mg/m³
General population	Inhalation	Systemic effect	Long term	4.57 mg/m³
General population	Inhalation	Local effect	Long term	0.36 mg/m³
General population	Oral	Systemic effect	Long term	0.1 mg/kg/day

PNEC - not available

Etidronic acid CAS: 2809-21-4

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	24 mg/m^3
Workers	Dermal	Systemic effect	Long term	34 mg/kg/day
General population	Inhalation	Systemic effect	Long term	12 mg/m^3
General population	Dermal	Systemic effect	Long term	34 mg/kg/day
General population	Oral	Systemic effect	Long term	3.4 mg/kg/day
General population	Oral	Systemic effect	Short term	3.4 mg/kg/day

PNEC

Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.675 mg/l	0.068 mg/l	not given	not given	40 mg/l

PNEC

Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
1350 mg/kg	135 mg/kg	no effect	4.73 mg/kg	not given

8.2. Exposure controls

8.2.1. Appropriate engineering 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.

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.

Eye/face protection

Wear safety glasses or face shield (EN 166, EN 149+A1).

Skin protection - hand protection

Wear protective gloves (EN 374-1, EN 374-2).

Suitable gloves material:

nitrile rubber, breakthrough time: ≥ 480 min., glove thickness: ≥ 0.11 mm

The selection of the glove material on consideration of the breakthrough time, permeability, degradation and next relevant factors; other chemicals that may come into contact, physical requirements (cut and puncture protection, dexterity, thermal protection), possible body reactions to the glove material and the glove supplier's instructions and specifications. In case of repeated use of gloves, clean and keep them in a well-ventilated place before taking off.

Skin protection - other

Suitable protective working clothing and protective footwear.

Respiratory protection

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

Thermal hazards

In normal use is not necessary protective equipment to be worn for materials that represent a thermal hazard.

8.2.3. Environmental exposure controls

Uncontrolled release of the mixture into environment is to be avoided. Keep the emission limits according to national legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Mixture	
Physical state	Liquid.
Colour	Colourless.
Odour	Odourless.
Melting point/freezing point	Not determined.
Boiling point or initial boiling point and boiling range	100 °C.
Flammability	Not determined.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point	> 100 °C.
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined, the mixture does not contain self-reactive substances or organic peroxides or other substances which may decompose.
pH	1.
Kinematic viscosity	Not determined, the mixture does not contain a substance classified as aspiration toxic, or the sum of the concentrations of substances classified as aspiration toxic is less than 10 wt. %.
Solubility	Miscible.
Partition coefficient n-octanol/water (log value)	Does not apply to mixture.
Vapour pressure	23 hPa
Density and/or relative density	D_4^{20} = 1.2.
Relative vapour density	Not determined.
Particle characteristics	Does not apply to liquid.

Phosphoric acid	CAS: 7664-38-2
Physical state	Solid.
Colour	Yellowish.
Odour	Not determined.

Melting point/freezing point	41.1 °C (EU method A.1).
Boiling point or initial boiling point and boiling range	296.5 °C (EU method A.2).
Flammability	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	Does not apply to solid.
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined.
Kinematic viscosity	Does not apply to solid.
Solubility	The substance is miscible with water, the solubility in water is higher than 1000 g / l (20 ° C, literature).
Partition coefficient n-octanol/water (log value)	Not determined, it is an inorganic substance.
Vapour pressure	4 Pa (20 °C, literature)
Density and/or relative density	D_4^{38} = 1.84 (EU method A.3).
Relative vapour density	Does not apply to solid.
Particle characteristics	Not determined.

Etidronic acid	CAS: 2809-21-4
Physical state	Solid.
Colour	Not determined.
Odour	Not determined.
Melting point/freezing point	≥ 450 °C (EU method A.1).
Boiling point or initial boiling point and boiling range	Not determined.
Flammability	The substance is not classified as flammable (EU method A.10).
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	Does not apply to solid.
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined.
Kinematic viscosity	Does not apply to solid.

Solubility	690 g/l (20 °C, literature).
Partition coefficient n-octanol/water (log value)	log Pow = -3.5 (literature).
Vapour pressure	Not determined, the substance has melting point higher than 300 °C.
Density and/or relative density	1 450 - 1 490 kg/m^3 (literature).
Relative vapour density	Does not apply to solid.
Particle characteristics	Not determined.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Mixture

Explosives

Data for the mixture are not available.
The mixture does not contain substances classified as explosives or oxidising, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

Flammable liquids

Data for the mixture are not available.
The mixture does not contain substances classified as flammable liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Flammable solids

It is not solid.

Self-reactive substances and mixtures

Data for the mixture are not available.
The mixture does not contain substances classified as self-reactive substances or explosives or organic peroxides or oxidising, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Pyrophoric liquids

Data for the mixture are not available.
The mixture does not contain substances classified as pyrophoric liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Pyrophoric solids

It is not solid.

Self-heating substances and mixtures

Data for the mixture are not available.

The mixture does not contain substances classified as self-heating or pyrophoric substances or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Substances and mixtures, which emit flammable gases in contact with water

Data for the mixture are not available.

The mixture does not contain substances classified as substances, which emit flammable gases in contact with water or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Oxidising liquids

Data for the mixture are not available.

The mixture does not contain substances classified as oxidising liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Oxidising solids

It is not solid.

Organic peroxides

Data for the mixture are not available.

The mixture does not contain substances classified as organic peroxides or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Corrosive to metals

Data for the mixture are not available.

The mixture is classified as corrosive to metal category 1 based on the general/specific concentration limits of substance(s).

Desensitised explosives

Data for the mixture are not available.

The mixture does not contain substances classified as explosives or desensitised explosives, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Phosphoric acid CAS: 7664-38-2

Explosives

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

Flammable liquids

It is not liquid.

Flammable solids

Data for the substance are not available.
The substance is not classified as flammable solid.

Self-reactive substances and mixtures

Data for the substance are not available.
The substance is not classified as self-reactive.

Pyrophoric liquids

It is not liquid.

Pyrophoric solids

Data for the substance are not available.
The substance is stable in air, there is no spontaneous ignition.

Self-heating substances and mixtures

Data for the substance are not available.
The substance is not classified as self-heating.

Substances and mixtures, which emit flammable gases in contact with water

Data for the substance are not available.
The chemical structure of the substance does not contain metals or metalloids.
The substance is soluble in water and forms a stable mixture with it.

Oxidising liquids

It is not liquid.

Oxidizing solids

Data for the substance are not available.
It is an inorganic substance does not contain chemical groups associated with oxidising properties.

Organic peroxides

Data for the substance are not available.
The substance does not contain a bivalent group -O-O- with at least one organic radical.

Corrosive to metals

Data for the substance are not available.
The substance is classified as corrosive to metal category 1.

Desensitised explosives

Data for the substance are not available.
The substance does not contain chemical groups associated with explosive properties.

Etidronic acid CAS: 2809-21-4

Explosives

Data for the substance are not available.
The substance does not contain chemical groups associated with explosive properties.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

Flammable liquids

It is not liquid.

Flammable solids

The substance is not classified as flammable, burning time = 2 minutes (EU method A.10).

Self-reactive substances and mixtures

Data for the substance are not available.
The substance is not classified as self-reactive substances.

Pyrophoric liquids

It is not liquid.

Pyrophoric solids

Data for the substance are not available.
The substance is stable in air, there is no spontaneous ignition.

Self-heating substances and mixtures

Data for the substance are not available.
The substance is not classified as self-heating.

Substances and mixtures, which emit flammable gases in contact with water

Data for the substance are not available.
The chemical structure of the substance does not contain metals or metalloids.
The substance is soluble in water and forms a stable mixture with it.

Oxidising liquids

It is not liquid.

Oxidizing solids

Data for the substance are not available.
It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

Organic peroxides

Data for the substance are not available.
The substance does not contain a bivalent group -O-O- with at least one organic radical.

Corrosive to metals

Data for the substance are not available.
The substance is classified as corrosive to metal.

Desensitised explosives

Data for the substance are not available.
The substance does not contain chemical groups associated with explosive properties.

9.2.2. Other safety characteristics

Mechanical sensitivity	Not determined, it is not an explosive substance.
Self-accelerating polymerisation temperature	Not determined, it is not a polymerising substance.
Formation of explosible dust/air mixtures	Not determined, it is not a dust.
Acid/alkaline reserve	Not determined.
Evaporation rate	Not determined.
Miscibility	Not determined.
Conductivity	Not determined.
Corrosiveness	Not determined.
Gas group	Not determined, it is not gas.
Redox potential	Not determined.
Radical formation potential	Not determined.
Photocatalytic properties	Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

The mixture is stable under normal conditions of use. There aren´t any hazardous reaction.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions aren´t known under normal conditions of use.

10.4. Conditions to avoid

Protect from frost.

10.5. Incompatible materials

Strong oxidising agents, bases. Mixture is corrosive to metals.

10.6. Hazardous decomposition products

They do not form under normal use. Burning releases carbon oxides, phosphor oxides, phosphine and products of incomplete combustion.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Mixture

Acute toxicity

The mixture is classified as Acute Tox. 4; H302.

Oral Data for the mixture are not available.
The mixture classified in category 4 based on the calculation of the additive formula.
$ATE_{mixture}$ > 688 mg/kg bw.

Dermal	Data for the mixture are not available. The mixture does not contain relevant 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.
Inhalation	Data for the mixture are not available. The mixture does not contain relevant 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 the general/specific concentration limits of substance(s).

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).

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.

STOT – single exposure

Data for the mixture are not available.

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

STOT – 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 sections 2 and 4.

Phosphoric acid CAS: 7664-38-2

Acute toxicity

Oral The substance is classified in category 4.

The LD_{50} for a 10% solution of 75.4% thermal phosphoric acid in rats was determined to be 1.70 ml/100 g bw (approximately 2 600 mg/kg bw, OECD 423)

ATE = 500 mg/kg bw (for calculation by additive formula)

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

LD_{50} > 2 000 mg/kg bw (rabbit, no death, 85% phosphoric acid, literature).

Inhalation Data for the substance are not available.

Skin corrosion/irritation

The substance is classified as skin corrosion in category 1B.

Mean erythema score = 4 (intact and abraded skin, not fully reversible after 72 hours) and oedema = 2.3 (intact skin, not fully reversible after 72 hours), 2.2 (abraded skin, not fully reversible after 72 hours), primary dermal irritation index PDII = 6.6 (80% phosphoric acid, rabbit).

Serious eye damage/irritation

The substance is classified as seriously damaging to the eyes.

Respiratory or skin sensitisation

Data for the substance are not available.

Germ cell mutagenicity

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

Negative (OECD 471, OECD 473, OECD 476).

Carcinogenicity

Data for the substance are not available.

Reproductive toxicity

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)

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

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

LOAEL = 155 mg/kg/day (nephrocalcinosis, rat, oral).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm^2/s or less at 40 °C.

Etidronic acid	CAS: 2809-21-4
Acute toxicity	
Oral	The substance is classified in category 4. LD_{50} = 1 878 mg/kg bw (rat, OECD 401).
Dermal	Based on available data, the classification criteria are not met. LD_{50} > 3 505 mg/kg bw (rabbit, OECD 402).
Inhalation	Data for the substance are not available.
Skin corrosion/irritation	
Based on available data, the classification criteria are not met. Mean erythema score = 0 and oedema = 0 (rabbit, 72 hrs., OECD 404).	
Serious eye damage/irritation	
The substance is classified as seriously damaging to the eyes. Maximum irritation score = ca. 90 of 110 (irreversible, rabbit, 72 hours, OECD 405).	
Respiratory or skin sensitisation	
Based on available data, the classification criteria are not met. Not skin sensitising (guinea pig, maximization test).	
Germ cell mutagenicity	
Based on available data, the classification criteria are not met. Negative (OECD 471, OECD 476, OECD 487).	
Carcinogenicity	
Based on available data, the classification criteria are not met. NOAEL ≥ 493 mg/kg/day (rat, female, oral, OECD 453). NOAEL ≥ 384 mg/kg/day (rat, female, oral, OECD 453).	
Reproductive toxicity	
Based on available data, the classification criteria are not met. NOAEL = 92 mg/kg/day (rat, female, oral, generation P0, OECD 416). NOAEL = 92 mg/kg/day (rat, female, oral, generation F1, OECD 416).	
STOT – single exposure	
Data for the substance are not available.	
STOT – repeated exposure	
Based on available data, the classification criteria are not met. NOAEL = 34 mg/kg/day (juvenile rats, rat, male, oral, 90 d., OECD 408). LOAEL = 139 mg/kg/day (anemia, rat, male, oral, 90 d., OECD 408).	
Aspiration hazard	
The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm^2/s or less at 40 °C.	

11.2. Information on other hazards

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet and given in the list (established in accordance with Article 59(1) for having endocrine disrupting properties of REACH regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. There is no other relevant information on adverse health effects that is not required according to the classification criteria set out in CLP Regulation. .

SECTION 12: Ecological information

12.1. Toxicity

Mixture

Data for the mixture are not available.

Acute aquatic toxicity

The mixture does not contain relevant substances classified as acute aquatic toxicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Chronic aquatic toxicity

The mixture does not contain relevant substances classified as a chronic aquatic toxicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Phosphoric acid CAS: 7664-38-2

The substance is not classified as hazardous for the aquatic environment.

Fish

Mean lethal pH, 96 hrs., Leopomis macrochirus: pH = 3 - 3.25 (mortality).

Crustaceans

EC_{50}, 48 hrs., Daphnia Magna: > 100 mg/ (immobility, OECD 202).
NOEC, 48 hrs., Daphnia Magna: 56 mg/l (immobility, OECD 202).

Algae

EC_{50}, 72 hrs., Desmodesmus subspicatus: > 100 mg/l (growth rate, OECD 201).
NOEC, 72 hrs, Desmodesmus subspicatus: 100 mg/l (growth rate, OECD 201).

Etidronic acid CAS: 2809-21-4

The substance is not classified as hazardous for the aquatic environment.

Fish

LC_{50}, 96 hrs., Oncorhynchus mykiss: 195 mg/l (mobility, OECD 204).
NOEC, 14 d., Oncorhynchus mykiss: 60 mg/l (behaviour, loss of equilibrium, OECD 204).

Crustaceans

EC_{50}, 48 hrs., Daphnia Magna: 527 mg/l (mobility, OECD 202).
NOEC, 28 d., Daphnia Magna: 60 mg/l (adult survival and number of pups, EPA 66013-75-009).

Algae

Data for the substance are not available.

12.2. Persistence and degradability

Mixture	
Data for the mixture are not available.	
Phosphoric acid	CAS: 7664-38-2
Not determined, it is an inorganic substance.	
Etidronic acid	CAS: 2809-21-4
Not readily biodegradable: BOD5/COD = 23 % (OECD 301 D). BOD - Biological Oxygen Demand. COD - Chemical Oxygen Demand.	

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.	
Etidronic acid	CAS: 2809-21-4
BCF < 7 (Cyprinus carpio, dose 0.06 mg/l). BCF < 2 (Cyprinus carpio, dose 0.6 mg/l). log Pow = -3.5 (literature).	

12.4. Mobility in soil

Mixture	
Data for the mixture are not available.	
Phosphoric acid	CAS: 7664-38-2
Not determined, it is an inorganic substance.	
Etidronic acid	CAS: 2809-21-4
log Koc = 4.22.	

12.5. Results of PBT and vPvB assessment

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH Regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation.

12.6. Endocrine disrupting properties

The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods of the substance or mixture and the contaminated packaging

Dispose according to the applicable European and local regulations (eg. in a hazardous waste incinerator). Do not empty unused product into drainage systems. Do not contaminate ponds or ditches with the product or used container. Hand over the residual amounts and solutions to a licensed disposal company.

Hand over the remaining quantities and unregenerate solutions to an authorized person (specialized company with authorization) or to the collection yard in the hazardous waste section according to the worker's instructions. Empty, cleaned packaging can be stored at a landfill of the appropriate category or **in the sorted waste**.

Possible waste code

07 06 01* - aqueous washing liquids and mother liquors or 20 01 29* - detergents containing hazardous substances (mixture), 15 01 10* - packaging containing residues of or contaminated by hazardous substances (contaminated packaging), 15 01 02 - plastic packaging (clear packaging)

Physical/chemical properties that may affect waste treatment options

Corrosivity to metals.

Special precautions recommended for waste management

Not known.

Waste legislation

Directive 2008/98/EC on waste and repealing certain Directives, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

UN 3264

14.2. UN proper shipping name

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric 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. Maritime transport in bulk according to IMO instruments

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

SECTION 15: Regulatory information

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

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

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

Regulation No. 648/2004/EC on detergents, as amended

15.2. Chemical safety assessment

It was not done for the mixture.

SECTION 16: Other information

Reason for the revision of the safety data sheet

First edition.

Key or legend to abbreviations and acronyms

Acute Tox. 4	Acute toxicity, cat. 4
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
ATE	Acute Toxicity Estimate

bw	body weight
ADR	Accord Dangereuses Route
CLP	Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures
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, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
STOT	Specific target organ toxicity
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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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. **Dispose of the cleaned packaging without any residual product content in the sorted waste.**

Training advice

According to SDS.

Other information

Classification according to data from the manufacturer. 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 safety data sheet has been prepared according to the best available knowledge. The safety data sheet has been compiled in good faith but without guarantee. Various factors may influence properties under specific conditions. It is the responsibility of the product user to assess the accuracy of the information for their specific application. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

The safety data sheet is prepared in accordance with Regulation No. 2020/878/EC. There is no additional information in accordance with the local and national legislation of the Member State in the European Union, in the safety data sheet.

The safety data sheet was prepared by LACHEPRA s.r.o.