SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING 1.1. Product identifier Product name : LACTICID Product code: 106726 1.2. Relevant identified uses of the substance or mixture and uses advised against INDUSTRIAL CLEANING DESCALING CLEANING OF MILKING EQUIPMENT Sectors of use: Food-processing industries Farming Main use category : Product intended for strictly professional use. Additional Information : The product should not be used for applications other than those described in this safety data sheet or in the technical documents for the product. Use descriptor system (REACH) : SU: 3, 1 - PC: 35.0 - PROC: 1, 2, 3, 4, 5, 7, 8a, 8b, 9, 13 - ERC: 4, 7, 9a 1.3. Details of the supplier of the safety data sheet Registered company name : IPC. Address : 10 QUAI CDT MALBERT - CS 71821.29218.BREST 2.FRANCE. Telephone : +33(0)8.98.43.45.44. Fax : +33(0)02.98.44.22.53. www.ipc-sa.com Distributeur 1.4. Emergency telephone number : +32 70 245 245. Association/Organisation : Antigifcentrum. International emergency phone number 112 SECTION 2 : HAZARDS IDENTIFICATION 2.1. Classification of the substance or mixture In compliance with EC regulation No. 1272/2008 and its amendments. Substance that is corrosive to metals, Category 1 (Met. Corr. 1, H290). Acute inhalation toxicity, Category 4 (Acute Tox. 4, H332). Skin corrosion, Category 1B (Skin Corr. 1B, H314). Serious eye damage, Category 1 (Eye Dam. 1, H318). Corrosive to the respiratory tract (EUH071). This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use. 2.2. Label elements Detergent mixture (see section 15). Mixture for spray application. In compliance with EC regulation No. 1272/2008 and its amendments. Hazard pictograms : GHS05 GHS07 Signal Word : DANGER

Product identifiers : EC 231-714-2 EC 231-633-2

NITRIC ACID PHOSPHORIC ACID

Hazard statements :	
H290	May be corrosive to metals.
H314 (Causes severe skin burns and eye damage.
H332 H	Harmful if inhaled.
EUH071	Corrosive to the respiratory tract.
Precautionary statements - Prevention :	
P260 I	Do not breathe gas, mist, vapors.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
Precautionary statements - Response :	
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 I	Immediately call a POISON CENTER or a doctor.
P390	Absorb spillage to prevent material damage.
Precautionary statements - Disposal :	
	Dispose of contents and container to approved waste disposal facility in accordance with national regulations.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Composition :					
Identification	(EC) 1272/2008	Note	%		
INDEX: 007_004_00_1	GHS06, GHS05	В	10 <= x % < 25		
CAS: 7697-37-2	Dgr	[1]			
EC: 231-714-2	Met. Corr. 1, H290				
REACH: 01-2119487297-23	Skin Corr. 1A, H314				
	Acute Tox. 3, H331				
NITRIC ACID	EUH:071				
INDEX: 015_011_00_6	GHS07, GHS05	В	2.5 <= x % < 10		
CAS: 7664-38-2	Dgr	[1]			
EC: 231-633-2	Met. Corr. 1, H290				
REACH: 01-2119485924-24-0005	Acute Tox. 4, H302				
	Skin Corr. 1B, H314				
PHOSPHORIC ACID					
Specific concentration limits:					
Identification	Specific concentration limits	ATE			
INDEX: 007_004_00_1	Skin Corr. 1A: H314 C>= 20%	inhalation: ATE = 2	2.65 mg/l 4h		
CAS: 7697-37-2	Skin Corr. 1B: H314 5% <= C < 20%	(vapours)			
EC: 231-714-2					
REACH: 01-2119487297-23					
NITRIC ACID					
INDEX: 015_011_00_6	Skin Corr. 1B: H314 C>= 25%	Skin Corr. 1B: H314 C>= 25% oral: ATE = 300 mg/kg BW			
CAS: 7664-38-2	Skin Irrit. 2: H315 10% <= C < 25%				
EC: 231-633-2	Eve Dam. 1: H318 C>= 25%	Eye Dam. 1: H318 C>= 25%			
REACH: 01-2119485924-24-0005	Eye Irrit. 2: H319 10% <= C < 25%				
PHOSPHORIC ACID					

Information on ingredients :

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

Keep the packaging with the label and/or the instructions available.

In the event of disturbance of consciousness, place the subject in a lateral safety position (lying on his side); call 15/112.

4.1. description of first aid measures

INTERVENE VERY QUICKLY - ALERT A DOCTOR - NEVER MAKE DRINK OR NEVER INDUCE VOMITING IF THE PATIENT IS UNCONSCIOUS OR HAS CONVULSIONS.

In the event of exposure by inhalation :

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation. Use the appropriate equipment.

In the event of inhalation of spray mist, seek medical attention immediately, showing the packaging or label.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

Remove contact lenses, if present and easy to do. Continue rinsing.

In the event of splashes or contact with skin :

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated aera is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

Remove contaminated clothing immediately and wash before reuse. Rinse skin thoroughly with water for 20 minutes. In severe cases or if you feel unwell, seek medical attention.

In the event of swallowing :

Do not give the patient anything orally.

Seek medical attention immediately, showing the label.

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

	•
After contact with the skin :	Corrosive to the skin. Causes severe burns. Risk of ulceration of the skin.
After contact with the eyes :	Corrosive to eyes. Risk of serious permanent eye damage if the product is not removed quickly. Vapor may cause eye irritation. Tears.
In case of inhalation :	Harmful by inhalation. Irritating to respiratory system. Symptoms of exposure to vapors include coughing and difficult breathing. Symptoms of overexposure to vapors include: nosebleeds. Inhalation of the product may cause pneumonia of a chemical nature.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

- In the event of a fire, use :
- sprayed water or water mist
- foam
- powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe in smoke.

In the event of a fire, the following may be formed :

- nitrogen oxide (NO)

- nitrogen dioxide (NO2)

- phosphorus oxides (PxOy)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

Prevent runoff into sewers and waterways. Use water spray to cool closed containers. Be aware of hazards from other hazardous substances in the immediate area.

Fire residues and contaminated extinguishing water must be disposed of according to local regulations in force.

Use self-contained breathing apparatus. Complete anti-acid protection equipment. Anti-acid boots. Anti-acid protective gloves. Please refer to section 8.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

No action shall be taken involving any personal risk or without suitable training. Evacuate the area.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Neutralise with an alkaline decontaminant, such as an aqueous solution of sodium carbonate or similar.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

All contaminated materials should be considered as waste for disposal according to local regulations (Refer to section 13).

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Do not inhale vapours.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from combustible materials

Keep away from sources of ignition, heat and direct light.

The ground of premises will be waterproof and will form basin of keeping back so that in case of spillage, the liquid cannot spread outside. Keep away from basic products.

Alcaline product. Product with chlorine. Strong reducing agent. Keep away from combustible materials. Flammable product.

Storage

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

Store in original packaging, tightly closed, protected from light, heat and cold.

Recommended temperature of storage: < 40°C

Packaging

Always keep in packaging made of an identical material to the original.

Recommended types of packaging :

- Vats

- Bottles

- Drums

Suitable packaging materials :

- Compatible grades HDPE.

Unsuitable packaging materials :

- Wood
- Cardboard
- Steel
- Copper
- Paper bag
- Textile

7.3. Specific end use(s)

Product intended for strictly professional use.

The mixture should not be used for applications other than those described in this safety data sheet and in the technical documents for the product.

Always read the label or the instructions before use, and follow all the instructions given there.

Respect the conditions of use of the product (concentration, contact time, ...).

Do not mix with other detergents or biocidal products.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

If this product contains ingredients with exposure limits, it may be necessary to carry out a continuous examination of persons, the atmosphere in the workplace or living organisms to determine the effectiveness of the ventilation or other control measures or assess the need for respiratory protective equipment.

Reference should be made to monitoring standards, such as :

European Standard EN 689 (Atmospheres of workplaces - Guidelines for the assessment of exposure to chemical agents for comparison with limit values and measurement strategy).

European Standard EN 14042 (Atmospheres of workplaces - Guide for the application and use of procedures and devices for assessing exposure to chemical and biological agents).

European Standard EN 482 (Atmospheres of workplaces - General requirements for the performance of chemical agent measurement procedures).

Reference should also be made to national technical guides on methods for the determination of hazardous substances.

Occupational exposure limits :

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3:	VME-ppm :	VLE-mg/m3:	VLE-ppm :	Notes :
7697-37-2	-	-	2.6	1	-
7664-38-2	1	-	2	-	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :			
7697-37-2	2 ppm	4 ppm						
7664-38-2	1 mg/m3	3 mg/m3						

- Germany - AGW	/ (BAuA - TRGS	900, 02/2022) :					
CAS	VME :	VME :	Excess	Notes			
7697-37-2		1 ppm					
		2.6 mg/m ³					
7664-38-2		2E mg/m ³		2(I)			
- France (INRS - 0	Outils 65 / 2021-1	849, 2021-1763	, decree of 09/2	12/2021):			
CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3:	Notes :	TMP No :]
7697-37-2	-	-	1	2.6	-	-]
7664-38-2	0.2	1	0.5	2	-	-	-
- Switzerland (Suv	va 2021) :						
CAS	VME	VLE	Valeur plafond	Notations]		
7697-37-2	2 ppm	2 ppm			-		
	5 mg/m ³	5 mg/m^3					
7664-38-2	2 ppm	4 ppm			-		
- UK / WEL (Wor	rkplace exposure	limits, EH40/20	05, Fourth Edit	ion 2020) :			
CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :]	
7697-37-2		1 ppm]	
		2.6 mg/m^3					
7664-38-2	1 mg/m ³	2 mg/m^3]	

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

PHOSPHORIC ACID ...% (CAS: 7664-38-2) **Final use:** Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

Final use:

Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

NITRIC ACID ...% (CAS: 7697-37-2)

Final use: Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Workers. Inhalation. Long term local effects. 1 mg of substance/m3

Inhalation. Short term local effects. 2 mg of substance/m3

Inhalation. Long term systemic effects. 10.7 mg of substance/m3

Consumers.

Ingestion. Long term systemic effects. 4.57 mg/kg body weight/day

Inhalation. Long term local effects. 0.36 mg of substance/m3

Workers.

Inhalation. Short term local effects. 2.6 mg of substance/m3

Inhalation. Long term local effects. 1.3 mg of substance/m3

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

When spraying, wear a face shield in accordance with standard EN166.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

- Type of gloves recommended :
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)
- Neoprene® (Polychloroprene)
- Teflon® (Polytetrafluoroethylene (PTFE))
- Recommended properties :

- Impervious gloves in accordance with standard EN ISO 374-2 (Type B)

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of spraying, wear protective clothing against chemical risks and against sprayed liquid (type 4) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Suitable type of protective boots :

In the event of minor spatter, wear protective boots or half-boots against chemical risks in accordance with standard EN13832-2.

In the event of spraying, wear waterproof boots or half-boots made of nitrile rubber in accordance with standard EN13832-3.

In the event of prolonged contact, wear boots or half-boots with liquid-chemical-resistant and waterproof soles and uppers in accordance with standard EN13832-3.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid inhaling vapors.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Category :

- FFP2

Type of mask with combined filters :

Wear a half mask in accordance with standard EN140.

- B2 (Grey)	
- E2 (Yellow)	
- NOP3 (Blue + white)	
Particle filter according to standard EN143 :	
- P2 (White)	
In case of brief exposure or low pollution use respiratory fi	ilter. Respiratory protection in accordance with EN 141.
If spray use, risk of excessive fog production, dust or vapor	rs, it is advisable to use approved respiratory protective equipment.
Exposure controls linked to environmental protection	
The discharge of large amounts into drains, pipelines or harmful to aquatic organisms.	the aquatic environment may lead to a sharp decrease in the pH value, which
ECTION 9 : PHYSICAL AND CHEMICAL PROPERTI	ES
9.1. Information on basic physical and chemical propertie	28
Physical state	
Physical state :	Fluid liquid.
Colour	
Cristal clear yellow fluorescent	
Odour	
Odour threshold :	Not stated.
Melting point	
Melting point/melting range :	Not relevant.
Freezing point	
Freezing point / Freezing range :	Not stated.
Boiling point or initial boiling point and boiling range	
Boiling point/boiling range :	Not relevant.
Flammability	
Flammability (solid, gas) :	Not stated.
Lower and upper explosion limit	
Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.
Flash point	
Flash point interval :	Not relevant.
Auto-ignition temperature	
Self-ignition temperature :	Not relevant.
Decomposition temperature	
Decomposition point/decomposition range :	Not relevant.
pH	
pH (aqueous solution) :	(1%) = 1,50 + -0,50
pH :	Not stated.
P	Strongly acidic.
Kinematic viscosity	
Viscosity :	Not stated.
Solubility	
Water solubility :	Soluble.
Fat solubility :	Not stated.
Partition coefficient n-octanol/water (log value)	
Partition coefficient: n-octanol/water :	Not stated.
Vapour pressure	
Vapour pressure (50°C) :	Not relevant.
Density and/or relative density	Tot forvant.
Density and/or relative density Density :	$-1.140 \text{ g/cm}3 \pm /_{-}0.020 \text{ b } 20^{\circ}\text{C}$
Relative vapour density	$= 1,140 \text{ g/cm3} + -0,020 \text{ à } 20^{\circ}\text{C}$
Nelauve valour density	

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

Mixture which by chemical action can corrode and even destroy metals.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

Contact with metals can release flammable hydrogen.

10.4. Conditions to avoid

- Avoid :
- frost
- heat

- exposure to light

10.5. Incompatible materials

- Keep away from :
- reducing agents
- alkalis
- alcohols
- bases
- strong bases
- combustible material
- flammable material
- organic material
- powdered metals (aluminium, magnesium, potassium, sodium and zinc)
- N/A
- chlorides

N/A

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- nitrogen oxide (NO)
- nitrogen dioxide (NO2)
- phosphorus oxides (PxOy)

The contact with metals can free from some flammable hydrogen.

SECTION 11 : TOXICOLOGICAL INFORMATION

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

Harmful by inhalation.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

May be corrosive to the respiratory tract

11.1.1. Substances

Acute toxicity :

NITRIC ACID ...% (CAS: 7697-37-2) Inhalation route (Vapours) :

LC50 = 2.65 mg/l OECD Guideline 403 (Acute Inhalation Toxicity) Duration of exposure : 4 h

PHOSPHORIC ACID% (CAS: 7664-38-2) Oral route :	LD50 = 300 mg/kg Species : Rat OECD Guideline 423 (Acute Oral toxicityAcute Toxic Class Method)
Germ cell mutagenicity : PHOSPHORIC ACID% (CAS: 7664-38-2)	No mutagenic effect.
NITRIC ACID% (CAS: 7697-37-2)	No mutagenic effect.
	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Ames test (in vitro) :	Negative.
Carcinogenicity :	
PHOSPHORIC ACID% (CAS: 7664-38-2) Carcinogenicity Test :	Negative. No carcinogenic effect.
NITRIC ACID% (CAS: 7697-37-2) Carcinogenicity Test :	Negative. No carcinogenic effect.
Reproductive toxicant : PHOSPHORIC ACID% (CAS: 7664-38-2) No toxic effect for reproduction	
NITRIC ACID% (CAS: 7697-37-2) No toxic effect for reproduction Study on fertility : Study on development :	Species : Rat Species : Rat OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Specific target organ systemic toxicity - repeated ex	posure :
PHOSPHORIC ACID% (CAS: 7664-38-2) Oral route :	C = 250 mg/kg bodyweight/day Species : Rat Duration of exposure : 90 days OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NITRIC ACID% (CAS: 7697-37-2) Oral route :	C = 1500 mg/kg bodyweight/day Species : Rat Duration of exposure : 28 days OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Inhalation route :	C > 2.15 ppmV/6h/day Species : Rat Duration of exposure : 90 days OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
11.1.2. Mixture	

Acute toxicity :

The mixture is classified as harmful by inhalation. H332.

Skin corrosion/skin irritation :

Causes burns to the skin. H314.

Serious damage to eyes/eye irritation :

Causes severe eye damage. H314.

Symptoms related to the physical, chemical and toxicological characteristics

N/A

Mixture versus substance information

May be corrosive to metals (H290).

11.2. Information on other hazards

Endocrine disrupting properties

The mixture does not contain ingredients considered to have endocrine disrupting properties according to Article 57, point f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or more.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

PHOSPHORIC ACID% (CAS: 7664-38-2)
Crustacean toxicity :

EC50 >= 100 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

ECr50 > 100 mg/l Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

Algae toxicity :

12.2.1. Substances

NITRIC ACID ...% (CAS: 7697-37-2) Biodegradability :

Rapidly degradable.

12.3. Bioaccumulative potential

No data available.

12.3.1. Substances

NITRIC ACID% (CAS: 7697-37-2)	
Octanol/water partition coefficient :	$\log \text{Koe} = -0.21$

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The blend does not contain any ingredients considered persistent, bio-accumulating and toxic (PBT), or very persistent and very bio-accumulating (vPvB) at levels of 0.1% or greater, in accordance with appendix XIII of the REACH regulation (EC) $n^{\circ}1907/2006$.

12.6. Endocrine disrupting properties

The mixture does not contain ingredients considered to have endocrine disrupting properties according to Article 57, point f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or more.

12.7. Other adverse effects

Rejecting large quantities into drains or waters may lead to a significant decrease in pH value. A low pH value is harmful to aquatic organisms.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not throw directly into waterways or the environment. The disposal of the product / packaging with its label must be carried out in an approved waste collection center.

Do not dispose of the product in drains (sinks, toilets, etc.), gutters, waterways, in the open field or in any other outdoor environment.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

All contaminated material must be considered as waste with a view to its elimination according to the regulations in force.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :

15 02 02 * absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

15 01 10 * packaging containing residues of or contaminated by dangerous substances

06 01 06 * other acids

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2021 - IMDG 2020 [40-20] - ICAO/IATA 2022 [63]).

14.1. UN number or ID number

3264

14.2. UN proper shipping name

UN3264=CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid ...%, phosphoric acid ...%)

14.3. Transport hazard class(es)

- Classification :



8

14.4. Packing group

Π

14.5. Environmental hazards

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C1	II	8	80	1 L	274	E2	2	E
			-	_						_
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage	Segregation	
								Handling		
	8	-	II	1 L	F-A. S-B	274	E2	Category B	SGG1 SG36	
								SW2	SG49	
										_
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	8	-	II	851	1 L	855	30 L	A3 A803	E2	
	8	-	II	Y840	0.5 L	-	-	A3 A803	E2	

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG. For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

- Container information:

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

- Particular provisions :

N/A

- Labelling for detergents (EC Regulation No. 648/2004,907/2006) :

- 5 % or over but less than 15 % : phosphates

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
EUH071	Corrosive to the respiratory tract.

Abbreviations :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

DNEL : Derived No-Effect Level

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ERC 4 - Industrial use of processing aids in processes and products, not becoming part of articles

ERC 7 - Industrial use of sub-stances in closed systems

ERC 9a - Wide dispersive indoor use of substances in closed systems

PC 35 - Washing and cleaning products (including solvent based products)

PROC 1 - Use in closed process, no likelihood of exposure

PROC 13 - Treatment of articles by dipping and pouring

PROC 2 - Use in closed, continuous process with occasional controlled exposure

PROC 3 - Use in closed batch process (synthesis or formulation)

PROC 4 - Use in batch and other process (synthesis) where opportunity for exposure arises

PROC 5 - Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC 7 - Industrial spraying

PROC 8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC 8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC 9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

SU 1 - Agriculture, forestry, fishery

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

 $vPvB: Very \ persistent, \ very \ bioaccumulable.$

SVHC : Substances of very high concern.