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: DETARMAX ID

Product code: 103392.

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

N/A

1.3. Details of the supplier of the safety data sheet

Registered company name: IPC S.A.S..

Address: 10, Quai Commandant Malbert - CS 71821.29218.BREST Cedex 1.France.

Telephone: +33 (0)2 98 43 45 44. Fax: +33 (0)2 98 44 22 53.

ipc@groupe-ipc.com http://www.ipc-sa.com

1.4. Emergency telephone number: +33 (0)2.98.43.45.44.

Association/Organisation: .

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).

Skin corrosion, Category 1A (Skin Corr. 1A, H314).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

May produce an allergic reaction (EUH208).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H335).

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).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms:





GHS05

GHS07

Signal Word : DANGER

Product identifiers:

EC 231-595-7 HYDROCHLORIC ACID EC 231-633-2 PHOSPHORIC ACID

Additional labeling:

EUH208 Contains METHENAMINE. May produce an allergic reaction.

Hazard statements:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statements - Prevention:

P264 Wash thoroughly after handling.

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

Precautionary statements - Response:

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/...

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 $\geq 0.1\%$ 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:

Identification	(EC) 1272/2008	Note	%
INDEX: 017_002_01_X	GHS05, GHS07	В	10 <= x % < 25
CAS: 7647-01-0	Dgr	[1]	
EC: 231-595-7	Met. Corr. 1, H290		
REACH: 01-2119484862-27-XXXX	Skin Corr. 1B, H314		
	STOT SE 3, H335		
HYDROCHLORIC ACID	,		
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	Acute Tox. 4, H302		
	Skin Corr. 1B, H314		
PHOSPHORIC ACID			
INDEX: 202	GHS07		2.5 <= x % < 10
CAS: 5949-29-1	Wng		
EC: 201-069-1	Eye Irrit. 2, H319		
REACH: 01-2119457026-42-XXXX			
ACIDE CITRIQUE			
INDEX: 603_014_00_0	GHS07	[1]	$2.5 \le x \% \le 10$
CAS: 111-76-2	Wng		
EC: 203-905-0	Acute Tox. 4, H302		
REACH: 01-2119475108-36-XXXX	Acute Tox. 4, H312		
	Skin Irrit. 2, H315		
2-BUTOXYETHANOL	Eye Irrit. 2, H319		
	Acute Tox. 4, H332		
INDEX: 612_101_00_2	GHS07, GHS02		$0 \le x \% \le 2.5$
CAS: 100-97-0	Wng		
EC: 202-905-8	Flam. Sol. 2, H228		
REACH: 01-2119474895-20-XXXX	Skin Sens. 1, H317		
METHENAMINE			

Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 017_002_01_X	Skin Corr. 1B: H314 C>= 25%	inhalation: ATE = 45.6 mg/l 4h
CAS: 7647-01-0	Skin Irrit. 2: H315 10% <= C < 25%	(dust/mist)
EC: 231-595-7	Eye Dam. 1: H318 C>= 25%	oral: ATE = 700 mg/kg BW
REACH: 01-2119484862-27-XXXX	Eye Irrit. 2: H319 10% <= C < 25%	
HYDROCHLORIC ACID		

INDEX: 015_011_00_6	Skin Corr. 1B: H314 C>= 25%	dermal: ATE = 1260 mg/kg BW
CAS: 7664-38-2	Skin Irrit. 2: H315 10% <= C < 25%	
EC: 231-633-2	Eye Dam. 1: H318 C>= 25%	
REACH: 01-2119485924-24	Eye Irrit. 2: H319 10% <= C < 25%	
PHOSPHORIC ACID		
INDEX: 202		oral: ATE = 5400 mg/kg BW
CAS: 5949-29-1		
EC: 201-069-1		
REACH: 01-2119457026-42-XXXX		
ACIDE CITRIQUE		
INDEX: 603_014_00_0		oral: ATE = 1300 mg/kg BW
CAS: 111-76-2		
EC: 203-905-0		
REACH: 01-2119475108-36-XXXX		
2-BUTOXYETHANOL		
INDEX: 612_101_00_2		oral: ATE = 9200 mg/kg BW
CAS: 100-97-0		
EC: 202-905-8		
REACH: 01-2119474895-20-XXXX		
METHENAMINE		

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.

4.1. description of first aid measures

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.

In the event of an allergic reaction, seek medical attention.

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.

In the event of splashes or contact with skin:

Remove any soiled or splashed clothing immediately.

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

In the event of an allergic reaction, seek medical attention.

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.

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

No data available.

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
- multipurpose ABC powder
- BC 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:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- hydrogen chloride (HCl)
- phosgene (CCl2O)
- chlorine (Cl2)

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.

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.

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.

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.

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

No data available.

Storage

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

Packaging

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

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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:
7647-01-0	8	5	15	10	-
7664-38-2	1	-	2	-	-
111-76-2	98	20	246	50	Peau

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

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7647-01-0			2 ppm	A4	
7664-38-2	1 mg/m3	3 mg/m3			
111-76-2	20 ppm			A3; BEI	

- Germany - AGW (BAuA - TRGS 900, 02/2022):

CAS	VME:	VME:	Excess	Notes
7647-01-0		2 ppm		2(I)
		3 mg/m³		
7664-38-2		2E mg/m³		2(I)
111-76-2		10 ppm		2(I)
		49 mg/m ³		

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021):

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No:
7647-01-0	-	-	5	7.6	-	-

7664-38-2	0.2	1	0.5	2	-	-	-
111-76-2	10	49	50	246	*	84	

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7647-01-0	1 ppm	5 ppm			
	2 mg/m^3	8 mg/m ³			
7664-38-2	1 mg/m³	2 mg/m³			
111-76-2	25 ppm	50 ppm		Sk. BMGV	
	123 mg/m ³	246 mg/m ³			

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

METHENAMINE (CAS: 100-97-0)

Final use:Exposure method:
Workers.
Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 6.4 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Short term systemic effects.

DNEL: 229 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.
DNEL: 5.6 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term systemic effects. DNEL: 1400 mg of substance/m3

Final use: Consumers.

Exposure method: Ingestion.

Potential health effects: Long term systemic effects.

DNEL: 0.8 mg/kg body weight/day

Exposure method: Ingestion.

Potential health effects: Short term systemic effects.

DNEL: 20 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects. DNEL: 1.9 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Short term systemic effects.
DNEL: 22.9 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects. DNEL: 1.2 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term systemic effects.

DNEL: 140 mg of substance/m3

2-BUTOXYETHANOL (CAS: 111-76-2)

Final use: Workers.
Exposure method: Dermal contact.

Potential health effects: Short term systemic effects. DNEL: 89 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.
DNEL: 75 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Short term systemic effects.

DNEL: 663 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term local effects.
DNEL: 246 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.
DNEL: 98 mg of substance/m3

Final use: Consumers.

Exposure method: Ingestion.

Potential health effects: Short term systemic effects.

DNEL: 13.4 mg/kg body weight/day

Exposure method: Ingestion.

Potential health effects: Long term systemic effects.

DNEL: 3.2 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Short term systemic effects.

DNEL: 44.5 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 38 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Short term systemic effects.

DNEL: 426 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term local effects.
DNEL: 123 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.
DNEL: 49 mg of substance/m3

PHOSPHORIC ACID ...% (CAS: 7664-38-2)

Final use:Exposure method:
Workers.
Inhalation.

Potential health effects: Long term local effects.

DNEL: 1 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects. DNEL: 10.7 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term local effects.

DNEL: 2 mg of substance/m3

HYDROCHLORIC ACID ...% (CAS: 7647-01-0)

Final use:Exposure method:
Workers.
Inhalation.

Potential health effects: Long term local effects.

DNEL: 8 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term local effects.

DNEL: 15 mg of substance/m3

Predicted no effect concentration (PNEC):

METHENAMINE (CAS: 100-97-0)

Environmental compartment: Soil.

PNEC: 0.28 mg/kg

Environmental compartment: Fresh water. PNEC: 3 mg/l

Environmental compartment: Sea water. PNEC: 0.3 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 30 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 2.4 mg/kg

Environmental compartment: Marine sediment.

PNEC: 0.4 mg/kg

Environmental compartment: Waste water treatment plant. PNEC: 100 mg/l

2-BUTOXYETHANOL (CAS: 111-76-2)

Environmental compartment: Soil. PNEC: 2.8 mg/kg

Environmental compartment: Fresh water. PNEC: 8.8 mg/l

Environmental compartment: Sea water. PNEC: 0.88 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 34.6 mg/kg

Environmental compartment: Marine sediment. PNEC: 3.46 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 463 mg/l

ACIDE CITRIQUE (CAS: 5949-29-1)

Environmental compartment: Soil. PNEC: 29.2 mg/kg

Environmental compartment: Fresh water. PNEC: 0.44 mg/l

Environmental compartment: Sea water. PNEC: 0.044 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 7.52 mg/kg

Environmental compartment: Marine sediment. PNEC: 0.752 mg/kg

HYDROCHLORIC ACID ...% (CAS: 7647-01-0)

Environmental compartment: Fresh water. PNEC: 0.036 mg/l

Environmental compartment: Sea water. PNEC: 0.036 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 0.045 mg/l

Environmental compartment: Marine sediment. PNEC: 0.045 mg/l

Environmental compartment: Waste water treatment plant.

PNEC: 0.036 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

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.

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)
- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing:

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

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

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 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.

Flammability (solid, gas):

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Physical state: Fluid liquid. Colour N/A Odour Odour threshold: Not stated. Melting point Melting point/melting range: Not specified. Freezing point Not stated. Freezing point / Freezing range: Boiling point or initial boiling point and boiling range Boiling point/boiling range: Not specified. Flammability

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 specified.

Decomposition temperature

Decomposition point/decomposition range: Not specified.

pН

pH: 0.50 +/-0.5.

Strongly acidic.

pH (aqueous solution): Not stated.

Kinematic viscosity

Viscosity: Not stated.

Solubility

Water solubility: Dilutable.
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

Density: 1.2

Relative vapour density

Vapour density: Not stated.

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

No data available.

10.4. Conditions to avoid

Avoid:

- frost

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- hydrogen chloride (HCl)
- phosgene (CCl2O)

- chlorine (Cl2)

SECTION 11: TOXICOLOGICAL INFORMATION

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

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

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.

Respiratory tract irritation may occur, together with symptoms such as coughing, choking and breathing difficulties.

11.1.1. Substances

Acute toxicity:

METHENAMINE (CAS: 100-97-0)

Oral route: LD50 = 9200 mg/kg

Species: Rat

Dermal route : LD50 > 2000 mg/kg

Species: Rat

OECD Guideline 402 (Acute Dermal Toxicity)

2-BUTOXYETHANOL (CAS: 111-76-2)

Oral route : LD50 = 1300 mg/kg

Species: Rat

OECD Guideline 401 (Acute Oral Toxicity)

Species: Rat

OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Vapours): LC50 > 3.1 mg/l

Species: Guinea pig

ACIDE CITRIQUE (CAS: 5949-29-1)

Oral route: LD50 = 5400 mg/kg

Species: Mouse

Dermal route : LD50 > 2000 mg/kg

Species: Rat

PHOSPHORIC ACID ...% (CAS: 7664-38-2)

Oral route : LD50 \leq 2000 mg/kg

Species: Rat

Dermal route : LD50 = 1260 mg/kg

Species: Rat

HYDROCHLORIC ACID ...% (CAS: 7647-01-0)

Oral route: LD50 = 700 mg/kg

Species: Rat

Dermal route: LD50 > 5010 mg/kg

Species : Rabbit

Inhalation route (Dusts/mist): LC50 = 45.6 mg/l

Species: Rat

Duration of exposure: 4 h

Skin corrosion/skin irritation:

2-BUTOXYETHANOL (CAS: 111-76-2)

Effect observed: Overall irritation score

Species: Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Respiratory or skin sensitisation:

METHENAMINE (CAS: 100-97-0)

Guinea Pig Maximisation Test (GMPT): Sensitiser.

Species: Guinea pig

OECD Guideline 406 (Skin Sensitisation)

2-BUTOXYETHANOL (CAS: 111-76-2)

Guinea Pig Maximisation Test (GMPT): Non-sensitiser.

Species: Guinea pig

Germ cell mutagenicity:

ACIDE CITRIQUE (CAS: 5949-29-1)

Mutagenesis (in vivo): Negative.

Mutagenesis (in vitro): Negative.

2-BUTOXYETHANOL (CAS: 111-76-2)

No mutagenic effect.

Mutagenesis (in vivo): Negative.

Species: Mouse

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro): Negative.

Species: Bacteria

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Carcinogenicity:

2-BUTOXYETHANOL (CAS: 111-76-2)

Carcinogenicity Test: Negative.

No carcinogenic effect.

Species: Rat

OECD Guideline 451 (Carcinogenicity Studies)

11.1.2. Mixture

Skin corrosion/skin irritation:

Corrosive classification is based on an extreme pH value.

Respiratory or skin sensitisation:

Contains at least one sensitising substance. May cause an allergic reaction.

11.2. Information on other hazards

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

METHENAMINE (CAS: 100-97-0)

Fish toxicity: LC50 = 49800 mg/l

Species: Pimephales promelas

Duration of exposure: 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity: EC50 = 36000 mg/l

Species : Daphnia magna Duration of exposure : 48 h

Algae toxicity: ECr50 3000 mg/l

Species: Pseudokirchnerella subcapitata

Duration of exposure: 96 h

NOEC = 1.5 mg/l

Species: Pseudokirchnerella subcapitata

Duration of exposure: 14 days

2-BUTOXYETHANOL (CAS: 111-76-2)

Fish toxicity: LC50 = 1474 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC > 100 mg/l Species : Danio rerio

Duration of exposure : 21 days

Crustacean toxicity: EC50 = 1550 mg/l

Species : Daphnia sp. Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC = 100 mg/l Species : Daphnia magna Duration of exposure : 21 days

OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity: ECr50 = 1840 mg/l

Species: Pseudokirchnerella subcapitata

Duration of exposure: 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

ACIDE CITRIQUE (CAS: 5949-29-1)

Fish toxicity: LC50 < 706 mg/l

Duration of exposure: 48 h

Crustacean toxicity: EC50 = 1535 mg/l

Species: Daphnia magna

Algae toxicity: ECr50 = 640 mg/l

Species : Scenedesmus quadricauda Duration of exposure : 96 h

PHOSPHORIC ACID ...% (CAS: 7664-38-2)

Fish toxicity: LC50 = 3 mg/l

Species: Lepomis macrochirus

Duration of exposure: 96 h

Crustacean toxicity: EC50 > 100 mg/l

Species : Daphnia magna Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity: ECr50 > 100 mg/l

Species: Desmodesmus subspicatus

Duration of exposure: 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

HYDROCHLORIC ACID ...% (CAS: 7647-01-0)

Fish toxicity: LC50 = 369 mg/l

Species : Brachydanio rerio Duration of exposure : 96 h

Crustacean toxicity: EC50 = 213 mg/l

Species : Daphnia magna Duration of exposure : 48 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

METHENAMINE (CAS: 100-97-0)

Biodegradability: Non-rapidly degradable.

2-BUTOXYETHANOL (CAS: 111-76-2)

Biodegradability: Rapidly degradable.

ACIDE CITRIQUE (CAS: 5949-29-1)

Chemical oxygen demand : DCO = 0.728 g/g

Biodegradability: Rapidly degradable.

DBO5/DCO = 1

12.3. Bioaccumulative potential

12.3.1. Substances

METHENAMINE (CAS: 100-97-0)

Octanol/water partition coefficient : log Koe = -2.18

OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

2-BUTOXYETHANOL (CAS: 111-76-2)

Octanol/water partition coefficient : log Koe = 0.81

OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

Bioaccumulation: BCF < 100.

ACIDE CITRIQUE (CAS: 5949-29-1)

Octanol/water partition coefficient : log Koe = 1.72

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

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 pour into drains or waterways.

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.

Soiled packaging:

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

Give to a certified disposal contractor.

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.

(hydrochloric acid ...%, phosphoric acid ...%)

14.3. Transport hazard class(es)

- Classification :



Q

14.4. Packing group

II

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	Е

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	8	-	II	1 L	F-A. S-B	274	E2	·· · · · · · · · · · · · · · · · · · ·	SGG1 SG36 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 :

No data available.

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

- less than 5 %: anionic surfactants

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.

Flammable solid

Wording of the phrases mentioned in section 3:

,	11220	Tallillable Soliu.
]	H290	May be corrosive to metals.
]	H302	Harmful if swallowed.
]	H312	Harmful in contact with skin.
]	H314	Causes severe skin burns and eye damage.
]	H315	Causes skin irritation.
]	H317	May cause an allergic skin reaction.
]	H319	Causes serious eye irritation.
]	H332	Harmful if inhaled.
]	H335	May cause respiratory irritation.

Abbreviations:

H228

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.

NOEC: The concentration with no observed effect.

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

ATE: Acute Toxicity Estimate

BW: Body Weight

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

STEL: Short-term exposure limit TWA: Time Weighted Averages

TMP : French Occupational Illness table TLV : Threshold Limit Value (exposure)

AEV: Average Exposure Value.

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.