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 ALU

Product code : 305120-305130

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

IPC - 10 Quai Malbert

29200 BREST France

Tél : +33(0)2.98.43.45.44 - Fax : +33 (0)2.98.44.22.53

ipc@groupe-ipc.com

1.4. Emergency telephone number : 01 45 42 59 59.

Association/Organisation : INRS.

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 oral toxicity, Category 4 (Acute Tox. 4, H302).

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

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

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 231-633-2	PHOSPHORIC ACID
EC 231-639-5	SULPHURIC ACID
EC 215-676-4	AMMONIUM BIFLUORIDE
CAS 68439-46-3	ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11

Hazard statements :

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

Precautionary statements - Prevention :

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

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/...
Precautionary statements - Disposal :	
P501	Dispose of contents/container to ...

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 59 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 :

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 015_011_00_6 CAS: 7664-38-2 EC: 231-633-2 REACH: 01-2119485924-24 PHOSPHORIC ACID	GHS07, GHS05 Dgr Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1B, H314	B [i]	10 <= x % < 25
INDEX: 016_020_00_8 CAS: 7664-93-9 EC: 231-639-5 REACH: 01-2119458838-20-XXXX SULPHURIC ACID	GHS05 Dgr Skin Corr. 1A, H314	B [i]	2.5 <= x % < 10
INDEX: 603_064_00_3 CAS: 107-98-2 EC: 203-539-1 REACH: 01-2119457435-35-XXXX MONOPROPYLENE GLYCOL METHYL ETHER	GHS07, GHS02 Wng Flam. Liq. 3, H226 STOT SE 3, H336	[i]	2.5 <= x % < 10
INDEX: 009_009_00_4 CAS: 1341-49-7 EC: 215-676-4 REACH: 01-211948180-38-xxxx AMMONIUM BIFLUORIDE	GHS06, GHS05 Dgr Acute Tox. 3, H301 Skin Corr. 1B, H314		2.5 <= x % < 10
INDEX: 509 CAS: 68439-46-3 ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11	GHS07, GHS05 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318		0 <= x % < 2.5

Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 015_011_00_6 CAS: 7664-38-2 EC: 231-633-2 REACH: 01-2119485924-24 PHOSPHORIC ACID	Skin Corr. 1B: H314 C>= 25% Skin Irrit. 2: H315 10% <= C < 25% Eye Dam. 1: H318 C>= 25% Eye Irrit. 2: H319 10% <= C < 25%	dermal: ATE = 1260 mg/kg BW

INDEX: 016_020_00_8 CAS: 7664-93-9 EC: 231-639-5 REACH: 01-2119458838-20-XXXX SULPHURIC ACID		inhalation: ATE = 375 mg/l (dust/mist) oral: ATE = 2140 mg/kg BW
INDEX: 603_064_00_3 CAS: 107-98-2 EC: 203-539-1 REACH: 01-2119457435-35-XXXX MONOPROPYLENE GLYCOL METHYL ETHER		oral: ATE = 4016 mg/kg BW
INDEX: 009_009_00_4 CAS: 1341-49-7 EC: 215-676-4 REACH: 01-211948180-38-xxxx AMMONIUM BIFLUORIDE		oral: ATE = 130 mg/kg BW
INDEX: 509 CAS: 68439-46-3 ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11		oral: ATE = 1200 mg/kg BW

Information on ingredients :

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

[i] 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 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.

If the contaminated area 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.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water, administer activated medical charcoal and consult a doctor.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show 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

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)

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 any contact with the skin and eyes.

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 :

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.

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 away from food and drink, including those for animals.

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 :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
7664-38-2 PHOSPHORIC ACID ...%	1	-	2	-	-
7664-93-9 SULPHURIC ACID ...%	0.05	-	-	-	-
107-98-2 MONOPROPYLENE GLYCOL METHYL ETHER	375	100	568	150	-

- UK :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7664-38-2 PHOSPHORIC ACID ...%	1 mg/m3	2 mg/m3			
7664-93-9 SULPHURIC ACID ...%	0.05 mg/m3				
107-98-2 MONOPROPYLENE GLYCOL METHYL ETHER	100 ppm 375 mg/m3	150 ppm 560 mg/m3			

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

AMMONIUM BIFLUORIDE (CAS: 1341-49-7)

Final use:	**Workers.**
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	3.8 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	2.3 mg of substance/m3

Final use:	**Consumers.**
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	0.045 mg of substance/m3

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	50.6 mg/kg body weight/day

Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	553.5 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	369 mg of substance/m3
Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	3.3 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	18.1 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	43.9 mg of substance/m3

SULPHURIC ACID ...% (CAS: 7664-93-9)

Final use:	**Workers.**
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	0.05 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	0.1 mg of substance/m3

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

Final use:	**Workers.**
Exposure method:	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

Predicted no effect concentration (PNEC):

AMMONIUM BIFLUORIDE (CAS: 1341-49-7)

Environmental compartment:	Soil.
PNEC :	22 mg/kg
Environmental compartment:	Fresh water.
PNEC :	1.3 mg/l
Environmental compartment:	Waste water treatment plant.

PNEC : 76 mg/l

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Environmental compartment: Soil.
PNEC : 4.59 mg/kg

Environmental compartment: Fresh water.
PNEC : 10 mg/l

Environmental compartment: Sea water.
PNEC : 1 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 100 mg/l

Environmental compartment: Fresh water sediment.
PNEC : 52.3 mg/kg

Environmental compartment: Marine sediment.
PNEC : 5.2 mg/kg

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

SULPHURIC ACID ...% (CAS: 7664-93-9)

Environmental compartment: Fresh water.
PNEC : 0.0025 mg/l

Environmental compartment: Sea water.
PNEC : 0.00025 mg/l

Environmental compartment: Fresh water sediment.
PNEC : 0.002 mg/kg

Environmental compartment: Marine sediment.
PNEC : 0.002 mg/kg

Environmental compartment: Waste water treatment plant.
PNEC : 8.8 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 ISO 16321.

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.

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

Freezing point / Freezing range :	Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not specified.

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 specified.

Decomposition temperature

Decomposition point/decomposition range :	Not specified.

pH

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 :	1.15

Relative vapour density

Vapour density :	Not stated.

Particle characteristics

The mixture does not contain nanoforms.

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

N/A

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

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

11.1.1. Substances

a) Acute toxicity :

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

Oral route :	LD50 = 1200 mg/kg body weight Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 2000 mg/kg body weight Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (Dusts/mist) :	LC50 > 0.22 mg/l Species : Rat

AMMONIUM BIFLUORIDE (CAS: 1341-49-7)

Oral route :	LD50 = 130 mg/kg body weight Species : Rat

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Oral route :	LD50 = 4016 mg/kg body weight Species : Rat
Dermal route :	LD50 > 2000 mg/kg body weight Species : Rabbit
Inhalation route (Dusts/mist) :	LC50 > 25.8 mg/l Species : Rat

SULPHURIC ACID ...% (CAS: 7664-93-9)

Oral route :	LD50 = 2140 mg/kg body weight Species : Rat
Inhalation route (Dusts/mist) :	LC50 = 375 mg/l

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

Oral route :	LD50 < 2000 mg/kg body weight Species : Rat
Dermal route :	LD50 = 1260 mg/kg body weight Species : Rat

b) Skin corrosion/skin irritation :

No data available.

c) Serious damage to eyes/eye irritation :

No data available.

d) Respiratory or skin sensitisation :

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

Guinea Pig Maximisation Test (GMPT) :	Non-sensitiser. Species : Guinea pig OECD Guideline 406 (Skin Sensitisation)

e) Germ cell mutagenicity :

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

Mutagenesis (in vivo) :	Negative. OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)
Mutagenesis (in vitro) :	Negative. OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

f) Carcinogenicity :

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

Carcinogenicity Test :	Negative. No carcinogenic effect.

g) Reproductive toxicant :

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

No toxic effect for reproduction

h) Specific target organ systemic toxicity - single exposure :

No data available.

i) Specific target organ systemic toxicity - repeated exposure :

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

Oral route :	C >= 500 mg/kg body weight/day Species : Rat Duration of exposure : 90 days
Dermal route :	C >= 125 mg/kg body weight/day Species : Rat Duration of exposure : 90 days

j) Aspiration hazard :

No data available.

11.1.2. Mixture

11.1.2.1 Information on hazard classes

a) Acute toxicity :

Oral route :	Harmful if swallowed.
Dermal route :	No data available.
Inhalation route (Dusts/mist) :	No data available.

b) Skin corrosion/skin irritation :

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.

- Classification based on extreme pH and an acid or alkaline reserve

Corrosive classification is based on an extreme pH value.

c) Serious damage to eyes/eye irritation :

No data available.

d) Respiratory or skin sensitisation :

No data available.

e) Germ cell mutagenicity :

No data available.

f) Carcinogenicity :

No data available.

g) Reproductive toxicant :

No data available.

h) Specific target organ systemic toxicity - single exposure :

No data available.

i) Specific target organ systemic toxicity - repeated exposure :

No data available.

j) Aspiration hazard :

No data available.

11.1.2.2 Other information

11.2. Information on other hazards

Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

Fish toxicity :	LC50 = 12 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
	NOEC = 1.47 mg/l Species : Pimephales promelas Duration of exposure : 28 days OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test)
Crustacean toxicity :	EC50 = 5.4 mg/l Species : Daphnia magna Duration of exposure : 48 h
	NOEC = 2.579 mg/l Species : Daphnia magna Duration of exposure : 21 days OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 > 8.9 mg/l Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)
Aquatic plant toxicity :	Duration of exposure : 21 days

AMMONIUM BIFLUORIDE (CAS: 1341-49-7)

Fish toxicity :	LC50 = 422 mg/l Species : Salmo gairdneri Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 10.5 mg/l Species : Daphnia magna Duration of exposure : 96 h

Algae toxicity :	ECr50 = 43 mg/l Species : Agmenellum quadruplicatum Duration of exposure : 96 h

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Fish toxicity :	LC50 = 6812 mg/l Species : Leuciscus idus Duration of exposure : 96 h Other guideline
Crustacean toxicity :	EC50 < 25900 mg/l Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 > 1000 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 96 h

SULPHURIC ACID ...% (CAS: 7664-93-9)

Fish toxicity :	LC50 = 16 mg/l Species : Lepomis macrochirus Duration of exposure : 96 h NOEC = 0.025 mg/l Species : Salvelinus fontinalis
Crustacean toxicity :	EC50 > 100 mg/l Species : Daphnia magna Duration of exposure : 48 h NOEC = 0.15 mg/l Species : Others
Algae toxicity :	ECr50 = 100 mg/l Species : Desmodesmus subspicatus Duration of exposure : 72 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)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

Biodegradability : Rapidly degradable.

AMMONIUM BIFLUORIDE (CAS: 1341-49-7)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

ALCOOL GRAS ETHOXYLE A 8 MOLES EN C9-C11 (CAS: 68439-46-3)

Octanol/water partition coefficient : Log Kow < 3.76

Bioaccumulation : FBC < 800

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Octanol/water partition coefficient : Log Kow = 0.37

Bioaccumulation : FBC < 100

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

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, 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 2025 - IMDG 2024 [42-24] - ICAO/IATA 2026 [67]).

14.1. UN number or ID number

3264

14.2. UN proper shipping name

UN3264=CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

(sulphuric acid , ammonium bifluoride)

14.3. Transport hazard class(es)

- Classification :

8

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	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	8	-	II	1 L	F-A. S-B	274	E2	Category B SW2	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. 2023/707.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/2564. (ATP 22)

Container information:

No data available.

Particular provisions :

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

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.

Authorisations agreed under Title VII of Regulation (EC) No.1907/2006 (REACH):

The mixture does not contain any substance subject to authorisation according to Annex XIV of REACH Regulation (EC) No 1907/2006: https://echa.europa.eu/fr/authorisation-list.

Ozone-depleting substances (Regulation (EC) No 2024/590).

The mixture does not contain any substance posing a risk to the ozone layer.

Persistent organic pollutants (POP) (Regulation (EU) 2019/1021):

The mixture does not contain a persistent organic pollutant.

PIC Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (Rotterdam Convention):

The mixture is not subject to the Prior Informed Consent (PIC) procedure.

Explosives precursors :

The mixture contains at least one substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors:

- Sulphuric acid (CAS 7664-93-9)

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

- less than 5 % : non-ionic surfactants

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Wording of the phrases mentioned in section 3 :

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

Abbreviations and acronyms :

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.
LQ : Limited Quantity
EQ : Excepted Quantity
EmS : Emergency Schedule
E : Packing Instruction
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 Average
VLE : Threshold Limit Value (exposure)
VME : Average Exposure Value.
ADR : Agreement concerning the international carriage of dangerous goods by road.
GHS05 : Corrosion
GHS07 : Exclamation mark
IATA : International Air Transport Association.
IMDG : International Maritime Dangerous Goods.
ICAO : International Civil Aviation Organisation
PBT: Persistent, bioaccumulable and toxic.
PIC: Prior Informed Consent.
POP: Persistent Organic Pollutant.
RID : Regulations concerning the International carriage of Dangerous goods by rail.
SVHC : Substances of very high concern.
WGK : Water Hazard Class.

The information contained in this safety data sheet is based on our current knowledge at the time of publication and is provided in good faith. It does not constitute any guarantee of specific product properties nor establish any contractual relationship. The user remains solely responsible for safe and compliant use of the product in accordance with current regulations.
