

## SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

### SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name : ELECTROLYTE BUPAC

Product code : 17203.

ELECTROLYTE BUPAC / ELEKTROLYT BUPAC / ELECTROLIT BUPAC

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

Etching reagent

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

Registered company name : PRESI S.A.

Address : 11 Rue du vercors.38320.EYBENS.France.

Telephone : +33 (0)4.76.72.00.21. Fax : +33 (0)4.76.72.05.84.

presi@presi.com

www.presi.com

#### 1.4. Emergency telephone number : +33 (0)1.45.42.59.59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

### SECTION 2 : HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

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

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

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

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

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

#### 2.2. Label elements

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

Hazard pictograms :



GHS05



GHS07

Signal Word :

DANGER

Product identifiers :

603-014-00-0

2-BUTOXYETHANOL

EC 200-580-7

ACETIC ACID

EC 231-512-4

PERCHLORIC ACID

Hazard statements :

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.

P264

Wash ... thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

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P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor/... if you feel unwell.
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].
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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/...
P321	Specific treatment (see ... on this label).
P363	Wash contaminated clothing before reuse.
Precautionary statements - Storage :	
P405	Store locked up.
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)  $\geq 0.1\%$  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.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2. Mixtures**

**Composition :**

Identification	(EC) 1272/2008	Note	%
INDEX: 603-014-00-0 CAS: 111-76-2 EC: 203-905-0 REACH: 01-2119475328-30 2-BUTOXYETHANOL	GHS07 Wng Acute Tox. 4, H332 Acute Tox. 4, H312 Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315	[1]	25 $\leq$ x % < 50
CAS: 64-19-7 EC: 200-580-7 REACH: 01-2119475328-30 ACETIC ACID	GHS05, GHS02 Dgr Flam. Liq. 3, H226 Skin Corr. 1A, H314	B [1]	25 $\leq$ x % < 50
CAS: 7601-90-3 EC: 231-512-4 REACH: 01-2119978750-27 PERCHLORIC ACID	GHS05, GHS03 Dgr Ox. Liq. 1, H271 Skin Corr. 1A, H314	B	10 $\leq$ x % < 25

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

**Information on ingredients :**

[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 :**

Move to fresh air



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If symptoms persist, call a physician

**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.

Keep the person exposed at rest. Do not force vomiting.

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.

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**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 (CO<sub>2</sub>)
- phosgene (CCl<sub>2</sub>O)
- chlorine (Cl<sub>2</sub>)

**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.

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**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).



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**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.

Ensure that there is adequate ventilation, especially in confined areas.

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.

Packages which have been opened must be reclosed carefully and stored in an upright position.

**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.

Keep away from food and drink, including those for animals.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

**Packaging**

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

Suitable packaging materials :

- Polyethylene

**7.3. Specific end use(s)**

No data available.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

**Occupational exposure limits :**

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

CAS	VME-mg/m <sup>3</sup>	VME-ppm	VLE-mg/m <sup>3</sup>	VLE-ppm	Notes
111-76-2	98	20	246	50	Peau
64-19-7	25	10	50	20	-

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
111-76-2	20 ppm			A3; BEI	
64-19-7	10 ppm	15 ppm			

- Germany - AGW (BAuA - TRGS 900, 29/01/2018) :

CAS	VME :	VME :	Excess	Notes
111-76-2		10 ppm 49 mg/m <sup>3</sup>		4(II)
64-19-7		10 ppm 25 mg/m <sup>3</sup>		2(I)

- Canada / Ontario (Control of exposure to biological or chemical agents, regulation 491/2009) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
111-76-2	20 ppm	-	-	-	-

- Canada / Quebec (Regulations on occupational health and safety) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
111-76-2	20 ppm 97 mg/m <sup>3</sup>				
64-19-7	10 ppm 25 mg/m <sup>3</sup>	15 ppm 37 mg/m <sup>3</sup>			

- France (INRS - ED984 :2016) :

CAS	VME-ppm :	VME-mg/m <sup>3</sup> :	VLE-ppm :	VLE-mg/m <sup>3</sup> :	Notes :	TMP No :
111-76-2	10	49	50	246	*	84
64-19-7	-	-	10	25	-	-

- Japan (JSOH, 11/05/2017) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
111-76-2			20 ppm 97 mg/m <sup>3</sup>		
64-19-7	10 ppm 25 mg/m <sup>3</sup>				

- Switzerland (SUVAPRO 2017) :

CAS	VME	VLE	Valeur plafond	Notations
111-76-2	10 ppm 49 mg/m <sup>3</sup>	20 ppm 98 mg/m <sup>3</sup>		R B SSC
64-19-7	10 ppm 25 mg/m <sup>3</sup>	20 ppm 50 mg/m <sup>3</sup>		SSC

- USA / NIOSH IDLH (National Institute for Occupational Safety and Health, Immediately Dangerous to Life or Health Concentrations) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
111-76-2	5 ppm 24 mg/m <sup>3</sup>			skin	
64-19-7	10 ppm 25 mg/m <sup>3</sup>	15 ppm 37 mg/m <sup>3</sup>			

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
111-76-2	25 ppm 123 mg/m <sup>3</sup>	50 ppm 246 mg/m <sup>3</sup>		Sk, BMGV	

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

PERCHLORIC ACID ...% (CAS: 7601-90-3)

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

Exposure method:

**Man exposed via the environment.**

Ingestion.  
Long term systemic effects.  
16.7 µg/kg body weight/day

Inhalation.



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Potential health effects: Long term systemic effects.  
DNEL : 0.058 mg of substance/m3

ACETIC ACID ...% (CAS: 64-19-7)

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

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

Exposure method:  
Potential health effects:  
DNEL :

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

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Man exposed via the environment.**  
Inhalation.  
Long term local effects.  
25 mg of substance/m3

Exposure method:  
Potential health effects:  
DNEL :

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

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

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Workers.**  
Dermal contact.  
Long term systemic effects.  
75 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Dermal contact.  
Short term systemic effects.  
89 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

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

Exposure method:  
Potential health effects:  
DNEL :

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

Exposure method:  
Potential health effects:  
DNEL :

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

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Man exposed via the environment.**  
Ingestion.  
Long term systemic effects.  
3.2 mg/kg body weight/day

Exposure method:  
Potential health effects:

Ingestion.  
Short term systemic effects.



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DNEL : 13.4 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: Dermal contact.  
Potential health effects: Short term systemic effects.  
DNEL : 44.5 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 426 mg of substance/m<sup>3</sup>

Exposure method: Inhalation.  
Potential health effects: Short term local effects.  
DNEL : 123 mg of substance/m<sup>3</sup>

**Predicted no effect concentration (PNEC):**

**PERCHLORIC ACID ...% (CAS: 7601-90-3)**

Environmental compartment: Soil.  
PNEC : 0.021 mg/l

Environmental compartment: Fresh water.  
PNEC : 0.021 mg/l

Environmental compartment: Sea water.  
PNEC : 0.002 mg/l

Environmental compartment: Intermittent waste water.  
PNEC : 147 mg/l

Environmental compartment: Fresh water sediment.  
PNEC : 4.67 mg/kg

Environmental compartment: Marine sediment.  
PNEC : 0.467 mg/kg

Environmental compartment: Waste water treatment plant.  
PNEC : 8.2 mg/l

**ACETIC ACID ...% (CAS: 64-19-7)**

Environmental compartment: Soil.  
PNEC : 0.47 mg/kg

Environmental compartment: Fresh water.  
PNEC : 3.058 mg/l

Environmental compartment: Sea water.  
PNEC : 0.3058 mg/l

Environmental compartment: Intermittent waste water.

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PNEC :	30.58 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 11.36 mg/kg
Environmental compartment: PNEC :	Marine sediment. 1.136 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 85 mg/l
<b>2-BUTOXYETHANOL (CAS: 111-76-2)</b>	
Environmental compartment: PNEC :	Soil. 3.13 mg/kg
Environmental compartment: PNEC :	Fresh water. 8.8 mg/l
Environmental compartment: PNEC :	Sea water. 0.88 mg/l
Environmental compartment: PNEC :	Intermittent waste water. 9.1 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 34.6 mg/kg
Environmental compartment: PNEC :	Marine sediment. 3.46 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 463 mg/l
Environmental compartment: PNEC :	Fresh water predators (oral). 0.02 g/kg

## 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.





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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**

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

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 :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

- Impervious gloves in accordance with standard EN374

**- 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 to prevent skin contact.

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

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.

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**

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

**General information :**

Physical state : Fluid liquid.

**Important health, safety and environmental information**

pH : Not stated.  
Strongly acidic.

Boiling point/boiling range : Not specified.

Flash point interval : Not relevant.

Vapour pressure (50°C) : Not relevant.

Density : > 1

Water solubility : Soluble.

Melting point/melting range : Not specified.

Self-ignition temperature : Not specified.

Decomposition point/decomposition range : Not specified.



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**9.2. Other information**

No data available.

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**SECTION 10 : STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

**10.4. Conditions to avoid**

No data available.

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)
- phosgene (CCl<sub>2</sub>O)
- chlorine (Cl<sub>2</sub>)

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**SECTION 11 : TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

Harmful if swallowed.

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.

2-butoxyethanol and its acetate are absorbed directly through the skin and have harmful effects on the blood.

**11.1.1. Substances**

No toxicological data available for the substances.

**11.1.2. Mixture**

No toxicological data available for the mixture.

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**SECTION 12 : ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Other adverse effects**

No data available.

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**German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :**

WGK 1 : Slightly hazardous for water.

**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 2017 - IMDG 2016 - ICAO/IATA 2017).

**14.1. UN number**

1760

**14.2. UN proper shipping name**

UN1760=CORROSIVE LIQUID, N.O.S.  
(acetic acid ...%)

**14.3. Transport hazard class(es)**

- Classification :



8

**14.4. Packing group**

III

**14.5. Environmental hazards**

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**14.6. Special precautions for user**

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C9	III	8	80	5 L	274	E1	3	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	8	-	III	5 L	F-A,S-B	223 274	E1

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	III	852	5 L	856	60 L	A3 A803	E1
	8	-	III	Y841	1 L	-	-	A3 A803	E1

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.



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

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. 2018/1480 (ATP 13)

**- Container information:**

No data available.

**- Particular provisions :**

No data available.

**- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :**

WGK 1 : Slightly hazardous for water.

**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 :**

H226	Flammable liquid and vapour.
H271	May cause fire or explosion; strong oxidiser.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

**Abbreviations :**

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

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 : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.