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 : ANTI LICHEN CAP VERT Product code : 304851 - 304862.

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

Antialgae, antilichens

Professional use.

1.3. Details of the supplier of the safety data sheet

Registered company name : IPC.

Address : 10 Quai Malbert.29200.BREST.FRANCE.

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

ipc@groupe-ipc.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.

Eye irritation, Category 2 (Eye Irrit. 2, H319).

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

Biocidal detergent mixture (see section 15).

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

Hazard pictograms :

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GHS07
Signal Word :
WARNING
Hazard statements :
H319
                                       Causes serious eye irritation.
Precautionary statements - Prevention :
P264
                                       Wash hands thoroughly after handling.
P280
                                       Wear eye protection/face protection.
Precautionary statements - Response :
P305 + P351 + P338
                                       IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and
                                       easy to do. Continue rinsing.
P337 + P313
                                       If eye irritation persists: Get medical advice/attention.
Precautionary statements - Disposal :
P501
                                       Dispose of contents/container in accordance with local / regional / national / international regulations.
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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.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :			
Identification	(EC) 1272/2008	Note	%
INDEX: 57 55 6		[1]	2.5 <= x % < 10
CAS: 57-55-6			
EC: 200-338-0			
REACH: 01-2119456809-23			
PROPYLENE GLYCOL			
INDEX: 64 17 5A	GHS07, GHS02	[1]	2.5 <= x % < 10
CAS: 64-17-5	Dgr		
EC: 200-578-6	Flam. Liq. 2, H225		
REACH: 01-2119457610-43	Eye Irrit. 2, H319		
ETHANOL			
INDEX: 79 33 4	GHS05		$0 \le x \% < 2.5$
CAS: 79-33-4	Dgr		
EC: 201-196-2	Skin Irrit. 2, H315		
REACH: 01-2119474164-39	Eye Dam. 1, H318		
LACTIC ACID			

(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 :

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

In the event of splashes or contact with eyes :

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

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Rinse thoroughly with water. If discomfort persists, consult a doctor.

In the event of swallowing :

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

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

Seek medical attention, 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
- 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)

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

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.

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 eye contact with this mixture.

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

Keep out of reach of children.

Storage

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

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.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

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

CAS	TWA:	STEL :	Ceiling :	Definition :	Criteria :	
64-17-5		1000 ppm		A3		
- Germany - A	GW (BAuA - TRGS	900, 29/01/201	8):			
CAS	VME :	VME :	Excess	Notes	7	
64-17-5		500 ppm 960 mg/m ³		2(II)		
- France (INRS	S - ED984 :2016) :					
CAS	VME-ppm :	VME-mg/m3	: VLE-ppm :	VLE-mg/m3:	Notes :	TMP No :
64-17-5	1000	1900	5000	9500	-	84
- UK / WEL (V	Workplace exposure	limits, EH40/20	005, 2011) :			
CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :	
57-55-6	150 ppm 474 mg/m ³	- ppm - mg/m ³				
64-17-5	1000 ppm 1920 mg/m ³	- ppm - mg/m ³				
- Belgium (Arı	êté du 09/03/2014,	2014) :				
CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :	
64-17-5	1000 ppm					

00 ppm

1907 mg/m³

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

ETHANOL (CAS: 64-17-5) 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 :

Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects:

Workers. Dermal contact. Long term systemic effects. 343 mg/kg body weight/day

Inhalation. Short term local effects. 1900 mg of substance/m3

Inhalation. Long term systemic effects. 950 mg of substance/m3

Consumers.

Ingestion. Short term systemic effects. 87 mg/kg body weight/day

Dermal contact. Long term systemic effects. 206 mg/kg body weight/day

Inhalation. Short term local effects. 950 mg of substance/m3

Inhalation. Long term systemic effects.

DNEL :

114 mg of substance/m3

Intermittent waste water.

Fresh water sediment.

Waste water treatment plant.

Marine sediment.

Soil.

0.63 mg/kg

Fresh water. 0.96 mg/l

Sea water.

0.79 mg/l

2.75 mg/l

3.6 mg/kg

2.9 mg/kg

580 mg/l

50 mg/kg

206 mg/l

Fresh water.

Soil.

Predicted no effect concentration (PNEC):

ETHANOL (CAS: 64-17-5) Environmental compartment: PNEC :

PROPYLENE GLYCOL (CAS: 57-55-6) Environmental compartment: PNEC : Environmental compartment: PNEC :

Environmental compartment: Sea water. PNEC : 26 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

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

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))

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

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

General information :	
Physical state :	Fluid liquid.
Colorless	
Odorless	
Important health, safety and environmental information	
pH :	2.30 +/- 0.2.
	Slightly acidic.
Boiling point/boiling range :	Not specified.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	1.003 +/- 0.001
Water solubility :	Soluble.
Melting point/melting range :	Not specified.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.
9.2. Other information	

9.2. Other information

No data available.

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

Avoid :

- frost

- heat

10.5. Incompatible materials

Keep away from :

- bases

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 toxicological effects

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days. Splashes in the eyes may cause irritation and reversible damage

11.1.1. Substances

Acute toxicity :

LACTIC ACID (CAS: 79-33-4) Oral route :

LD50 = 3750 mg/kg

ETHANOL (CAS: 64-17-5) Oral route :	LD50 = 10470 mg/kg Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 2000 mg/kg Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (n/a) :	LC50 = 51 mg/l Species : Rat Duration of exposure : 4 h
PROPYLENE GLYCOL (CAS: 57-55-6)	
Oral route :	LD50 > 5000 mg/kg Species : Rat
Dermal route :	LD50 > 2000 mg/kg Species : Rabbit
.1.2. Mixture	

No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 64-17-5 : IARC Group 1 : The agent is carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

11.

12.1.1. Substances ETHANOL (CAS: 64-17-5) Fish toxicity :

LC50 = 13000 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity :	EC50 = 5012 mg/l Species : Ceriodaphnia dubia		
	Duration of exposure : 48 h		

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of Member States and will be provided with their request or at the request of a detergent manufacturer.

12.2.1. Substances

ETHANOL (CAS: 64-17-5)
Biodegradability :

Rapidly degradable.

PROPYLENE GLYCOL (CAS: 57-55-6) Biodegradability :

Rapidly degradable.

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.

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

Exempt from transport classification and labelling.

- 14.1. UN number
- 14.2. UN proper shipping name
- 14.3. Transport hazard class(es)
- 144 0 11
- 14.4. Packing group
- 14.5. Environmental hazards
- -
- 14.6. Special precautions for user
- .

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 and its amendments EU . (ATP)

- Container information:

No data available.

- Particular provisions :

No data available.

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

- less than 5 % : anionic surfactants

- less than 5 % : nonionic surfactants
- disinfectants

- Labelling for biocidal products (Regulation 1896/2000, 1687/2002, 2032/2003, 1048/2005, 1849/2006, 1451/2007 and Directive 98/8/EC) :

Name	CAS	%	Product-type
ETHANOL	64-17-5	38.40 g/kg	02
LACTIC ACID	79-33-4	24.00 g/kg	02

Product-type 2 : Disinfectants and algaecides not intended for direct application to humans or animals.

15.2. Chemical safety assessment

No data available.

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 :

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

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.

 $WGK: Wassergefahrdungsklasse \ (Water \ Hazard \ Class).$

 $GHS07: Exclamation \ mark$

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.