Safety Datasheet
according to 1907/2006/EC

1 Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Chlorin L Tabletten

1.2. Relevant identified uses of the substance or mixture and uses advised against not determined.

Application of the substance / the preparation

- Water treatment

Details of the supplier of the safety data sheet

Manufacturer	IBA-Aqua-Pflege-Produkte GmbH	
Street:	Bruchstücker 56-58	
Town:	D-76661 Philippsburg	
Telefon:	07256 / 92 30 8 - 0	Telefax:07256 / 92 30 8 - 11
E-Mail:	info@iba-aqua.com	
Internet:	www.iba-aqua.com	

2. Hazards identification

2.1. Classification oft he substance or mixture according to Regulation (EC) No 1272/2008

GHS03 flame over circle H272 May intensify fire; oxidiser.

GHS09 environment H410 Very toxic to aquatic life with long lasting effects

GHS07

Acute Tox 4.	H302 Harmful if swallowed.
Eye Irrit. 2	H319 Causes serious eye irritation.
STOT SE 3	H335 May cause respiratory irritation

Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS03

GHS07

GHS09

Signal word	*Danger*
Hazard statements	
H272	May intensify fire; oxidiser.
H302+EUH031	Harmful if swallowed. Contact with acids liberates toxic gas.'
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P220	Keep/Store away from clothing/…/combustible materials
P221	Take any precaution to avoid mixing with combustibles
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards
Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicab

3. Composition/information on ingredients

3.1. Chemical characterization: Substances

CAS No. Description *87-90-1 1,3,5-Trichloro-1,3,5-triazine-2,4,6-trione*

Identification number(s) ***EC number:*** *201-782-8*
Index number: *613-031-00-5*

Dangerous components:

EG-Nr.	Bezeichnung	Anteil
CAS-Nr.		
Index-Nr.	GHS	
REACH-Nr.		
201-782-8	Symclosen (vgl. Trichlorisocyanursäure; 1,3,5-Trichlor-1,3,5-triazin-2,4,6-trion)	100 %
87-90-1	Ox. Sol. 2, H272; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Eye Irrit. 2, H319; STOT SE 3, H335	
613-031-00-5	Ox. Sol. 2, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H272 H302 H319 H335 H400 H410	

4. First aid measures

Description of first aid measures
General information:
Remove contaminated, soaked clothing immediately and dispose of safely.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
After eye contact:
Rinse opened eye for several minutes under running water.
Call a doctor immediately.
After swallowing:
Rinse out mouth and then drink plenty of water.
Call a doctor immediately.
Information for doctor:
Most important symptoms and effects, both acute and delayed No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5. Firefighting measures

Extinguishing media
Suitable extinguishing agents: Water
For safety reasons unsuitable extinguishing agents: Foam, Extinguishing powder
Special hazards arising from the substance or mixture
In case of combustion evolution of dangerous gases possible.
In case of fire, the following can be released: Hydrogen chloride (HCl)
Advice for firefighters
Protective equipment:
The usual precautionary measures are to be adhered to when handling chemicals.
Mouth respiratory protective device. Do not inhale explosion gases or combustion gases.

3. Accident release measures

Personal precautions, protective equipment and emergency procedures
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective clothing

Keep people at a distance and stay on the windward side.
Environmental precautions: Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
Dispose of the material collected according to regulations.
Reference to other sections
See Section 13 for disposal information.
See Section 8 for information on personal protection equipment.
See Section 7 for information on safe handling

7. Handling and storage

Handling:
Precautions for safe handling
Avoid contact with skin, eyes and clothing.
Keep receptacles tightly sealed.
Prevent formation of dust.
Ensure good ventilation/exhaustion at the workplace.
Keep away from heat and direct sunlight.

Information about fire - and explosion protection: Keep respiratory protective device available.
Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Unsuitable material for receptacle: zinc
Information about storage in one common storage facility:
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
Store away from flammable substances.
Further information about storage conditions:
Keep container tightly sealed.
Store receptacle in a well ventilated area.
Store in a cool place.
Protect against heating up/overheating. Keep ignition sources away - Do not smoke.
Storage class: 5.1B Inflammatory substances
Specific end use(s) No further relevant information available

8. Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
Control parameters
Ingredients with limit values that require monitoring at the workplace: Not required.
Additional information: The lists valid during the making were used as basis.
Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Avoid close or long term contact with the skin.
Storing food in the working area is prohibited.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin

8. Exposure controls/personal protection

Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Short term filter device: Filter A/P3

Protection of hands:

Protective gloves

Material of gloves
Natural rubber, NR
Recommended thickness of the material: ³ 0.7 mm
Penetration time of glove material Time for permeation appr. 120 min

Eye protection:

Tightly sealed goggles

Body protection:
Protective work clothing
Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.
The resistance of the protective clothing to chemicals should be ascertained with the respective supplier

9. Physical and chemical properties

Information on basic physical and chemical properties **General Information** **Appearance:** **Form:** Tablets **Colour:** colourless **Odour:** Like chlorine
pH-value (10 g/l) at 20°C: 2.7 - 3.3 (in H2O)
Change in condition **Melting point/Melting range:** 225 - 230°C **Boiling point/Boiling range:** not determined
Flash point: Not applicable.
Ignition temperature: 240°C
Danger of explosion: Explosive when mixed with combustible material.
Density: Not determined.
Solubility in / Miscibility with water at 20°C: 12 g/l
Solids content: 100 % **Other information** No further relevant information available.

10. Stability and reactivity

Reactivity
Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
To avoid:
Protect against heating up/overheating; Keep away from ignition and heat sources (e.g. direct sun light).
Possibility of hazardous reactions Reacts with organic substances.
Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
To avoid:
Protect against heating up/overheating; Keep away from ignition and heat sources (e.g. direct sun light).
Possibility of hazardous reactions Reacts with organic substances.

11. Toxicological information

Information on toxicological effects
Acute toxicity:

· **LD/LC50 values relevant for classification:**
Oral LD50 490 mg/kg (rat)

Primary irritant effect:
on the skin: No irritant effect.
on the eye: irritant
Sensitization: No sensitizing effects known

12. Ecological information

Toxicity

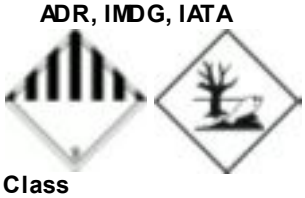
Aquatic toxicity:
EC50/48 h 0.44 mg/l (Crustacea)
LC50/96 h 0.23 mg/l (fish)

Persistence and degradability No further relevant information available.
Behaviour in environmental systems:
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Additional ecological information:
General notes:
Water hazard class 2(VwVwS): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Very toxic for aquatic organisms
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects No further relevant information available.

13. Disposal considerations

Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.
Uncleaned packaging:
Recommendation:
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

14. Transport information

UN-Number **ADR, IMDG, IATA**	UN3077
UN proper shipping name **ADR, IMDG, IATA**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,3- Dichlor-triazin-2,4-trion sodium salt dihydrate)
Transport hazard class(es) **ADR, IMDG, IATA** 	
Class	9 Miscellaneous dangerous substances and articles.
Label	9
ADN/R Class:	9
Packing group **ADR, IMDG, IATA**	III
Environmental hazards:	
Marine pollutant:	Yes (P) Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
Special precautions for user Warning: Miscellaneous dangerous substances and articles. **Danger code (Kemler):** 90 **EMS Number:** F-A,S-F	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable	
Transport/Additional information: **ADR** **Tunnel restriction code** E	
IMDG **UN-Number**	
UN "Model Regulation":	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

15. Regulatory information

Chemical safety assessment: *A Chemical Safety Assessment has not been carried out.*

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.
R22 Harmful if swallowed.
R31 Contact with acids liberates toxic gas.
R36/37 Irritating to eyes and respiratory system.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Department issuing MSDS: *Product safety*
Contact: *Bernhard Overmann*
Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
P: Marine Pollutant
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Sources *Literature value*
Data compared to the previous version altered.