Safety Data Sheet
PM-680 IVERLINER PLUS

Safety Data Sheet dated 14/8/2023, version 7

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

1.1. Product identifier

Trade name: PM-680 IVERLINER PLUS

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

Recommended use:

Algaecide product (TP 2) for winterizing swimming pools.

Uses advised against:

No uses advised against.

1.3. Details of the supplier of the safety data sheet

Company:

BONET ESPECIALITATS HIDROQUÍMIQUES, S.L.U.

C/Holanda, 41. P.I.Pla de Llerona

Les Franqueses del Vallès (08520) (Spain)

Telf: (+34) 900 82 87 81, 93 846 53 36

Fax: (+34) 93 846 78 21

info@behqsl.com

Competent person responsible for the safety data sheet:

regulatory@behqsl.com

1.4. Emergency telephone number

In case of poisoning call the Spanish National Institute of Toxicology: +34 91 562 04 20

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Warning, Acute Tox. 4, Harmful if swallowed.

Danger, Skin Corr. 1, Causes severe skin burns and eye damage.

Warning, Aquatic Acute 1, Very toxic to aquatic life.

Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Danger

Hazard statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P103 Read carefully and follow all instructions.

P102+P405 Keep out of reach of children. Store locked up.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P280+P264 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash hands thoroughly after handling.
P363 Wash contaminated clothing before reuse.
P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents/container as hazardous waste through an authorized waste management company, in accordance with current regulations.

Special Provisions:

PACK1 The packing must be featured by a safety lock for children.
PACK2 The packing must have tactive indications of danger for blind people.

Contains

Quaternary ammonium chloride polymerized
Hydroxyethylidene diphosphonic acid (HEDP)

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 15% - < 20%	Quaternary ammonium chloride polymerized	CAS: 25988-97-0	3.1/4/Oral Acute Tox. 4 H302 4.1/A1 Aquatic Acute 1 H400 M=10. 4.1/C1 Aquatic Chronic 1 H410 M=1.
>= 15% - < 20%	Hydroxyethylidene diphosphonic acid (HEDP)	CAS: 2809-21-4 EC: 220-552-8 REACH No.: 01-21195103 91-53-XXXX	2.16/1 Met. Corr. 1 H290 3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately and dispose off safely.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Wash thoroughly the body (shower or bath).

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.
Give nothing to eat or drink.

In case of Inhalation:
Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed
Burns of eyes, skin, mucous membranes, and respiratory tract, risk of gastric perforation and severe pain (the absence of visible oral burns does not exclude the presence of esophageal burns).
Aspiration chemical pneumonia and metabolic acidosis.

4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
If swallowed assess endoscopy.
Contraindications: Gastric lavage, neutralization, activated charcoal and syrup of ipecac.
Symptomatic and support treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Water. Carbon dioxide (CO2).
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up
Wash with plenty of water.

6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
No smoking. Keep away from food, drink and animal feed.
Use appropriate personal protective equipment. Refer to paragraph 8.
Prevent entry of unauthorized persons.
Advice on general occupational hygiene:
Follow legislation on safety and health at work.

7.2. Conditions for safe storage, including any incompatibilities

As a general storage conditions, it should be avoided sources of heat, radiation, electricity and food contact. Store according to local legislation.
Store between 5 and 35 ºC in a dry and well ventilated place.
None in particular.
Store into the original container. Keep the container properly sealed and labeled.
Keep away from incompatible materials: see paragraph 10.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Protective gloves according to regulation EN 374.
Suitable material:
PVC (polyvinyl chloride).

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Colourless	--	--
Odour:	Slightly characteristic	--	--
Melting point/freezing point:	0 ºC	--	--
Boiling point or initial boiling point and boiling range:	100 ºC	--	--
Flammability:	Non-flammable	--	--
Lower and upper explosion limit:	Not available	--	Not available/Not applicable due to the nature/properties of the product.
Flash point:	Not available	--	Not available/Not applicable due to the nature/properties of the product.
Auto-ignition temperature:	Not available	--	Not available/Not applicable due

			to the nature/properties of the product.
Decomposition temperature:	Not available	--	Not available/Not applicable due to the nature/properties of the product.
pH:	0 - 1	--	--
Kinematic viscosity:	Not available	--	Not available/Not applicable due to the nature/properties of the product.
Solubility in water:	Soluble in water in all proportions	--	--
Solubility in oil:	Not available	--	Not available/Not applicable due to the nature/properties of the product.
Partition coefficient n-octanol/water (log value):	Not applicable	--	Not available/Not applicable due to the nature/properties of the product.
Vapour pressure:	Not available	--	Not available/Not applicable due to the nature/properties of the product.
Density and/or relative density:	1.120 - 1.150 (20 ºC)	--	--
Relative vapour density:	Not available	--	Not available/Not applicable due to the nature/properties of the product.
Particle characteristics:			
Particle size:	Not applicable	--	Not available/Not applicable due to the nature/properties of the product.

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Incompatible with organic matter, anionic detergents, ammonia derivatives and hypochlorite.
Incompatible with chromium, lead, aluminium, tin, zinc and its alloys (bronze, brass, etc.).

10.6. Hazardous decomposition products

Thermal decomposition releases hydrochloric acid and oxides of carbon, phosphorus and nitrogen. Gives off hydrogen by reaction with metals.

SECTION 11: Toxicological information

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

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

Quaternary ammonium chloride polymerized - CAS: 25988-97-0

a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 300-2000 mg/kg - Source: OECD 401
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: OECD 402
b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Rabbit Negative - Source: OECD 404
c) serious eye damage/irritation:
Test: Eye Irritant - Species: Rabbit Negative - Source: OECD 405
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin - Species: Guinea pig Negative - Source: OECD 406
e) germ cell mutagenicity:
Test: Genotoxicity - Route: Oral - Species: Mouse Negative - Source: OECD 474
f) carcinogenicity:
Test: Carcinogenicity - Route: Oral - Species: Rat Negative - Source: OECD 453
g) reproductive toxicity:
Test: NOAEL (Fertility) - Route: Oral - Species: Rat Negative - Source: OECD 416
Hydroxyethylidene diphosphonic acid (HEDP) - CAS: 2809-21-4
a) acute toxicity:
Test: LD50 - Route: Oral = 2850 mg/kg

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.

11.2. Information on other hazards

Endocrine disrupting properties:
No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.
Quaternary ammonium chloride polymerized - CAS: 25988-97-0
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia = 0.08 mg/l - Duration h: 48 - Notes: OECD 202
Endpoint: EC50 - Species: Desmodesmus subspicatus = 0.13 mg/l - Duration h: 72 - Notes: OECD 201
Endpoint: NOEC - Species: Desmodesmus subspicatus = 0.032 mg/l - Duration h: 72 - Notes: OECD 201
Endpoint: LC50 - Species: Onchorhynchus mykiss = 0.077 mg/l - Duration h: 96 - Notes: OECD 203
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Onchorhynchus mykiss = 0.024 mg/l - Notes: 28 days; OECD 215
Endpoint: NOEC - Species: Daphnia = 0.026 mg/l - Notes: 21 days; OECD TG 211

12.2. Persistence and degradability

Quaternary ammonium chloride polymerized - CAS: 25988-97-0
Biodegradability: Totally biodegradable - Test: 301 OCDE - Duration: 28 days - %: 81
Hydroxyethylidene diphosphonic acid (HEDP) - CAS: 2809-21-4

Biodegradability: Easily biodegradable - Test: BOD/COD - %: 60 - Notes: OCDE 301 A-F

12.3. Bioaccumulative potential

Quaternary ammonium chloride polymerized - CAS: 25988-97-0

Bioaccumulation: Not bioaccumulative

12.4. Mobility in soil

Quaternary ammonium chloride polymerized - CAS: 25988-97-0

Mobility in soil: Not mobile

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. Waste should not be disposed of through the sewer.

SECTION 14: Transport information

14.1. UN number or ID number

ADR-UN number:	3265
IATA-Un number:	3265
IMDG-Un number:	3265

14.2. UN proper shipping name

ADR-Shipping Name:	Corrosive liquid, acidic, organic, n.o.s. (mixture of hydroxyethylidene diphosphonic acid and poly(2-hydroxypropyldimethylammonium choride)), 8, III
IATA-Technical name:	Corrosive liquid, acidic, organic, n.o.s. (mixture of hydroxyethylidene diphosphonic acid and poly(2-hydroxypropyldimethylammonium choride)), 8, III
IMDG-Technical name:	Corrosive liquid, acidic, organic, n.o.s. (mixture of hydroxyethylidene diphosphonic acid and poly(2-hydroxypropyldimethylammonium choride)), 8, III

14.3. Transport hazard class(es)

ADR-Class:	8
ADR-Label:	8
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8

14.4. Packing group

ADR-Packing Group:	III
IATA-Packing group:	III
IMDG-Packing group:	III

14.5. Environmental hazards

Marine pollutant:	Marine pollutant

14.6. Special precautions for user

IMDG-Technical name:	Corrosive liquid, acidic, organic, n.o.s. (mixture of hydroxyethylidene diphosphonic acid and poly(2-hydroxypropyldimethylammonium choride)), 8, III

14.7. Maritime transport in bulk according to IMO instruments

No

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E1

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H302 Harmful if swallowed.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H290 May be corrosive to metals.
H318 Causes serious eye damage.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1	3.2/1	Skin corrosion, Category 1
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1

Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

This safety data sheet has been completely updated in compliance to Regulation 2020/878.
Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 4: First aid measures
SECTION 9: Physical and chemical properties
SECTION 11: Toxicological information
SECTION 12: Ecological information
SECTION 15: Regulatory information
SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Acute Tox. 4, H302	Calculation method
Skin Corr. 1, H314	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date.
It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.

KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.