

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

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

1.1 Product identifier

Trade name: **BAQUACIL™ PHMB**

Article number: 11530 baq

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

Sector of Use SU21 Consumer uses: Private households / general public / consumers

Product category

PC37 Water treatment chemicals

PC8 Biocidal products (e.g. Disinfectants, pest control)

Application of the substance / the preparation Water disinfectant

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Arch Water Products France now part of
LONZA MICROBIAL CONTROL
BP 219 - 37402 Amboise Cedex - FRANCE
phone : +33 (0)2 47 23 43 00
fax : +33 (0)2 47 23 12 21

framsds-reach.france.euwater@lonza.com

1.4 Emergency telephone number:

Europe >>> NCEC - Tel. +44 (0)1235 239 670

Africa & Middle East >>> NCEC - Tel. +44 (0)1235 239 671

N.AMERICA >>> ACEAN (Arch Chemicals Emergency Action Network) - Tel. +1 423 780 2970}

CALL A LOCAL NATIONAL POISON CONTROL UNIT

FOR UK CONTACT NCEC Tel 01865 407 333

* 2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

Trade name: BAQUACIL™ PHMB

(Contd. of page 1)



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.
 STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R37/38: Irritating to respiratory system and skin.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment:

Markings on the basis of internal knowledge

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.**Hazard pictograms**

GHS05 GHS07 GHS09

Signal word Danger**Hazard-determining components of labelling:**

Poly (hexamethylenebiguanide) hydrochloride

Hazard statements

H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read label before use.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash hands thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

Trade name: BAQUACIL™ PHMB












(Contd. of page 2)

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

3 Composition/information on ingredients

3.2 Chemical characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 27083-27-8 Poly (hexamethylenebiguanide) hydrochloride 10-<25%
 Polymer  Xn R22;  Xi R37/38-41;  Xi R43;  N R50/53
 Eye Dam. 1, H318;  Aquatic Acute 1, H400;  Aquatic Chronic 1, H410;  Acute Tox. 4, H302;  Skin Irrit. 2, H315;  Skin Sens. 1, H317;  STOT SE 3, H335

Additional information For the wording of the listed risk phrases refer to section 16.

* 4 First aid measures

4.1 Description of first aid measures**After inhalation**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact

Rinse with warm water.

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

After eye contact Rinse opened eye for several minutes (15) under running water. Then consult a doctor.**After swallowing** If symptoms persist consult doctor.**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

Trade name: **BAQUACIL™ PHMB**

(Contd. of page 3)

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents

Water spray

Foam

Carbon dioxide

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.

6.2 Environmental precautions:

Keep contaminated washing water and dispose of appropriately.

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* 7 Handling and storage

7.1 Precautions for safe handling No special precautions are necessary if used correctly.

Handling



DO NOT MIX WITH OTHER PRODUCTS

DO NOT DILUTE BEFORE USE

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: Store only in unopened original receptacles.**Information about storage in one common storage facility:** Not required.

Further information about storage conditions:

Protect from frost.

Keep receptacle tightly sealed.

7.3 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.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

Trade name: **BAQUACIL™ PHMB**

(Contd. of page 4)

8.1 Control parameters**Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls**Personal protective equipment****General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Respiratory protection:

Filter P2.

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.

Protection of hands:

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Rubber gloves

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Face protection

Body protection: Protective work clothing.

* 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Fluid
Colour:	Light blue
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value at 20 °C: 5.5

Change in condition

Melting point/Melting range: 0 °C

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

Trade name: **BAQUACIL™ PHMB**

(Contd. of page 5)

Boiling point/Boiling range:	102 °C
Flash point:	Not applicable
Flammability (solid, gaseous)	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density at 20 °C:	1.04 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Solvent content:	
Organic solvents:	0.0 %
Water:	80.0 %
9.2 Other information	No further relevant information available.

* 10 Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: Poisonous gases/vapours

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

Trade name: **BAQUACIL™ PHMB**

(Contd. of page 6)

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

27083-27-8 Poly (hexamethylenebiguanide) hydrochloride

Oral LD50 > 2000 mg/kg (rat)

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: possible irritation by eye contact

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

Markings on the basis of internal knowledge

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Irritant

*12 Ecological information

12.1 Toxicity

Aquatic toxicity:

27083-27-8 Poly (hexamethylenebiguanide) hydrochloride

CE50 0.09 mg/l (dm) (48 h)

ErC50 0.0191 mg/l (-) (72 h - Green algae)

LC50 0.026 mg/l (rainbow trout) (96 h)

12.2 Persistence and degradability Not easily biodegradable

12.3 Bioaccumulative potential Bio-accumulation improbable

12.4 Mobility in soil Adsorbs on soil.

Ecotoxicological effects:

Remark:

Very toxic for algae

Very toxic for fish

Additional ecological information:

General notes:

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods

Recommendation

Must be specially treated adhering to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

Trade name: **BAQUACIL™ PHMB**

(Contd. of page 7)

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agents:** Water, if necessary together with cleansing agents.* **14 Transport information****14.1 UN-Number****ADR, IMDG, IATA** UN3082**14.2 UN proper shipping name**

ADR 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Poly (hexamethylenebiguanide) hydrochloride)

IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Poly (hexamethylenebiguanide) hydrochloride)

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

Class 9 (M6) Miscellaneous dangerous substances and articles.
Label 9

IMDG, IATA

Class 9 Miscellaneous dangerous substances and articles.
Label 9

14.4 Packing group**ADR, IMDG, IATA** III**14.5 Environmental hazards:****Marine pollutant:** Yes

Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)**Special marking (IATA):** Symbol (fish and tree)**14.6 Special precautions for user** Warning: Miscellaneous dangerous substances and articles.**Danger code (Kemler):** 90**EMS Number:** F-A,S-F**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.**Transport/Additional information:****ADR****Excepted quantities (EQ):** E1**Limited quantities (LQ)** 5L**Transport category** 3

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.02.2013

Rev. Index : 14

Revision: 27.02.2013

Trade name: BAQUACIL™ PHMB

(Contd. of page 8)

Tunnel restriction code
UN "Model Regulation":

E
UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (Poly (hexamethylenebiguanide) hydrochloride), 9, III

* 15 Regulatory information

Directive 98/8/EC

Best before : see date on packaging

Providing this container when empty is thoroughly rinsed out in the pool, it may be disposed of via the recycling scheme

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

National regulations

Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.**15.2 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.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

R22 Harmful if swallowed.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

* **Data compared to the previous version altered.**