







Safety Data Sheet dated 9/3/2018, version 8

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

- 1.1. Product identifier
Trade name: PM-634 ALGIKLEAN
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Specific uses: Biocidal product, disinfectant (type 2).
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:
laboratorio@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.
 -  Warning, Aquatic Acute 1, Very toxic to aquatic life.
 -  Warning, Eye Irrit. 2, Causes serious eye irritation.
 -  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:



Warning

Hazard statements:

- H302 Harmful if swallowed.
- H319 Causes serious eye irritation.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

- P102 Keep out of reach of children.
- P270 Do not eat, drink or smoke when using this product.
- P280+P264 Wear protective clothing and eye protection. Wash hands thoroughly after handling.
- P273 Avoid release to the environment.

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P391 Collect spillage.

P501 Dispose of the contents and/or its container as hazardous waste through an authorized waste management company, in accordance with current regulations.

Special Provisions:

None

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

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

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
>= 25% - < 30%	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.

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.

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 ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

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

Skin and eyes irritation.

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:

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:

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- 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 and inhalation of dusts/vapours.
No smoking. Keep away from food, drink and animal feed.
Use appropriate personal protective equipment. Refer to paragraph 8.
Follow legislation on safety and health at work.
Prevent entry of unauthorized persons.
- 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 °C in a dry and well ventilated place.
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.

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

Respiratory protection:
 Not needed for normal use.

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:
Appearance and colour:	Pale blue liquid	--	--
Odour:	Slightly characteristic	--	--
Odour threshold:	Not Relevant	--	--
pH:	6.5 - 8.0	--	--
Melting point / freezing point:	0 °C	--	--
Initial boiling point and boiling range:	100 °C	--	--
Flash point:	Not applicable (aqueous solution)	--	--
Evaporation rate:	Not available	--	--
Solid/gas flammability:	Not flammable	--	--
Upper/lower flammability or explosive limits:	Not applicable	--	--
Vapour pressure:	Not available	--	--
Vapour density:	Not available	--	--
Relative density:	1.065 - 1.090 (20 °C)	--	--
Solubility in water:	Soluble in water in all proportions	--	--
Solubility in oil:	Not Relevant	--	--
Partition coefficient (n-octanol/water):	Not available	--	--
Auto-ignition temperature:	Not applicable (not flammable)	--	--
Decomposition temperature:	Not available	--	--
Viscosity:	Not available	--	--
Explosive properties:	No explosive	--	--
Oxidizing properties:	Non oxidizing	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Not Relevant	--	--
Fat Solubility:	Not Relevant	--	--
Conductivity:	Not Relevant	--	--
Substance Groups	Not Relevant	--	--

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relevant properties		
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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, aluminum, tin, zinc and its alloys (bronze, brass, etc.).
- 10.6. Hazardous decomposition products
Thermal decomposition releases hydrochloric acid and oxides of carbon and nitrogen.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
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
 - e) germ cell mutagenicity:
Test: Mutagenesis Negative - Source: OECD 471
Test: Genotoxicity - Route: Oral - Species: Mouse Negative - Source: OECD 474
 - f) carcinogenicity:
Test: Carcinogenicity - Route: Oral - Species: Rat Negative - Source: OECD 453
- If not differently specified, the information required in Regulation (EU)2015/830 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.

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 TG 202

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Endpoint: EC50 - Species: Scenedesmus subspicatus = 0.13 mg/l - Duration h: 72 -

Notes: OECD TG 201

Endpoint: NOEC - Species: Scenedesmus subspicatus = 0.032 mg/l - Duration h: 72 -

Notes: OECD TG 201

Endpoint: LC50 - Species: Onchorhynchus mykiss = 0.077 mg/l - Duration h: 96 -

Notes: OECD TG 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 -

Notes: N.A.

12.3. Bioaccumulative potential

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

Bioaccumulation: Not bioaccumulative - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. 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

ADR-UN number: 3082

IATA-Un number: 3082

IMDG-Un number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: Environmentally hazardous substance liquid, n.o.s.
(Quaternary ammonium chloride polymerized in aqueous solution), 9, III

IATA-Technical name: Environmentally hazardous substance liquid, n.o.s.
(Quaternary ammonium chloride polymerized in aqueous solution), 9, III

IMDG-Technical name: Environmentally hazardous substance liquid, n.o.s.
(Quaternary ammonium chloride polymerized in aqueous solution), 9, III

14.3. Transport hazard class(es)

ADR-Class: 9

ADR-Label: 9

IATA-Class: 9

IATA-Label: 9

IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

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- Marine pollutant: Marine pollutant
- 14.6. Special precautions for user
IMDG-Technical name: Environmentally hazardous substance liquid, n.o.s.
(Quaternary ammonium chloride polymerized in aqueous solution), 9, III
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
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) 2015/830
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)

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):

N.A.

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.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 4: First aid measures

SECTION 6: Accidental release measures

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SECTION 9: Physical and chemical properties
 SECTION 10: Stability and reactivity
 SECTION 11: Toxicological information
 SECTION 12: Ecological information
 SECTION 14: Transport 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
Aquatic Acute 1, H400	Calculation method
Eye Irrit. 2, H319	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.
 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.



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TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.