Safety Data Sheet
PM-624 ALGIBLACK

Safety Data Sheet dated 31/7/2018, version 8

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

1.1. Product identifier

Trade name: PM-624 ALGIBLACK

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, 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 gloves and eye protection. Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with the hazardous waste regulation.

Special Provisions:

None

Contains

Copper sulphate pentahydrate

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
>= 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=10.
>= 7% - < 10%	Copper sulphate pentahydrate	Index number: 029-023-00-4 CAS: 7758-99-8 EC: 231-847-6 REACH No.: 01-21195205 66-40-0000	3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 M=10. 4.1/C1 Aquatic Chronic 1 H410 M=10.

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 opthalmologist 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

Irritation of eyes, skin, mucous membranes, and respiratory tract.

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: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water, carbon dioxide (CO_2).
Extinguishing media which must not be used for safety reasons:
Water jet.

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 ºC 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:
Full safety glasses according to regulation EN 166.
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:
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:	Dark blue liquid	--	--
Odour:	Slightly characteristic	--	--
Odour threshold:	Not Relevant	--	--
pH:	9.0 - 11.0	--	--
Melting point / freezing point:	0 ºC	--	--
Initial boiling point and boiling range:	100 ºC	--	--
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:	1.105 - 1.130 (20 ºC)	--	--
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 relevant properties	Not Relevant	--	--

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

Keep away from heat, sparks and flames. Avoid moisture.

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 oxides of sulphur, carbon, copper, phosphorous and nitrogen. Also hydrochloric acid and hydrogen sulphide (H2S).

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 = 1672 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

Copper sulphate pentahydrate - CAS: 7758-99-8

a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 482 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 Positive - Source: OECD 405
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin - Species: Guinea pig Negative - Source: OCDE 406
e) germ cell mutagenicity:
Test: Genotoxicity - Species: Generic Bacteria Negative - Source: OCDE 471
g) reproductive toxicity:
Test: NOAEL - Species: Rat Negative - Source: OECD 416

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

Copper sulphate pentahydrate - CAS: 7758-99-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Daphnia > 25 mg/l

12.2. Persistence and degradability

Copper sulphate pentahydrate - CAS: 7758-99-8

Biodegradability: Non-readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

12.3. Bioaccumulative potential

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, copper sulphate pentahydrated), 9, III
IATA-Technical name:	Environmentally hazardous substance, liquid, n.o.s. (quaternary ammonium chloride polymerized, copper sulphate pentahydrated), 9, III
IMDG-Technical name:	Environmentally hazardous substance, liquid, n.o.s. (quaternary ammonium chloride polymerized, copper sulphate pentahydrated), 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
Marine pollutant: Marine pollutant

14.6. Special precautions for user
IMDG-Technical name: Environmentally hazardous substance, liquid, n.o.s. (quaternary ammonium chloride polymerized, copper sulphate pentahydrated), 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)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 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.
H318 Causes serious eye damage.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
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 5: Firefighting measures
SECTION 6: Accidental release measures
SECTION 9: Physical and chemical properties
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
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.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.