Safety Data Sheet
PM-112 SILNET

Safety Data Sheet dated 23/1/2019, version 6

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

1.1. Product identifier

Trade name: PM-112 SILNET

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

Recommended use:

Washing and cleaning products.

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)

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

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

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

P280 Wear protective gloves and eye/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container by delivery to an authorized collection point for hazardous waste in your town.

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

sulphuric acid ... %

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
>= 30% - < 40%	sulphuric acid ... %	Index number: 016-020-00-8 CAS: 7664-93-9 EC: 231-639-5 REACH No.: 01-2119458838-20-XXXX	 3.2/1A Skin Corr. 1A H314
>= 5% - < 7%	Citric acid monohydrate	CAS: 5949-29-1 REACH No.: 01-2119457026-42-XXXX	 3.3/2 Eye Irrit. 2 H319

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.
OBTAIN IMMEDIATE MEDICAL ATTENTION.

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.

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
None

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: None

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Carbon dioxide (CO_2), dry powder, foam resistant to alcohol and water spray.
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
sulphuric acid ... % - CAS: 7664-93-9
EU - TWA(8h): 0,05 mg/m3 - Notes: thoracic fraction
ACGIH - TWA(8h): 0.2 mg/m3 - Notes: (T), A2(M) - Pulm func
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:
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

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:	Pink transparent liquid	--	--
Odour:	Odourless	--	--
Odour threshold:	Not Relevant	--	--
pH:	<1	--	--
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:	1.270 - 1.295 (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
Avoid excessive heat for prolonged periods.
10.5. Incompatible materials
Strong oxidizing agents. Strong acids. Strong alkalis.
10.6. Hazardous decomposition products
Oxides of carbon.

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:
sulphuric acid ... % - CAS: 7664-93-9
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 2140 mg/kg - Source: OECD 401
b) skin corrosion/irritation:
Test: Skin Corrosive - Route: Skin - Species: Rabbit Yes
c) serious eye damage/irritation:
Test: Eye Corrosive - Species: Rabbit Yes
Citric acid monohydrate - CAS: 5949-29-1
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 11700 mg/kg
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.
sulphuric acid ... % - CAS: 7664-93-9
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 16-28 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48 - Notes: OECD TG 202
Endpoint: NOEC - Species: Bacteria = 26000 mg/l - Notes: 37 days, activated sludge
Citric acid monohydrate - CAS: 5949-29-1
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 135 mg/l - Notes: pH = 4
12.2. Persistence and degradability
Citric acid monohydrate - CAS: 5949-29-1

Biodegradability: Totally biodegradable - Test: BOD/COD - Duration: 5 days - %: 72

12.3. Bioaccumulative potential

Citric acid monohydrate - CAS: 5949-29-1

Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient -1.72

Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentrantion factor 0 - Notes: OECD 305

12.4. Mobility in soil

sulphuric acid ... % - CAS: 7664-93-9

Mobility in soil: Mobile

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. 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

ADR-UN number:	2796
IATA-Un number:	2796
IMDG-Un number:	2796

14.2. UN proper shipping name

ADR-Shipping Name:	Sulfuric acid with not more than 51% acid, 8, II
IATA-Technical name:	Sulfuric acid with not more than 51% acid, 8, II
IMDG-Technical name:	Sulfuric acid with not more than 51% acid, 8, II

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:	II
IATA-Packing group:	II
IMDG-Packing group:	II

14.5. Environmental hazards

Marine pollutant:	No

14.6. Special precautions for user

IMDG-Technical name:	Sulfuric acid with not more than 51% acid, 8, II

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)
Regulation (EU) n. 2017/776 (ATP 10 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

None

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:

H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification
SECTION 8: Exposure controls/personal protection
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
Skin Corr. 1A, H314	On basis of test data (pH)

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.