

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

SIBOM®

Name: Boehmite (CAS: 1318-23-6, EC: 215-284-3)**REACH Registration number:** 01-2119555298-28-0018**Synonyms**

The product names refer to additional codes representing different material grades:

SIBOM P84, SIBOM P84-VLS, SIBOM MP-84-1, SIBOM MP-84-2, SIBOM MP84-1-VLS, SIBOM MP84-2-VLS, SIBOM P76

<https://my.chemius.net/p/Aptya9/en/pd/en>

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

Relevant identified uses

Additive, flame retardant, filler, catalyst, ceramics industry

Uses advised against

No information.

1.3 Details of the supplier of the safety data sheet

ManufacturerSILKEM, d. o. o.
Tovarniška cesta 10
2325 Kidričevo, Slovenia
+386 2 7991 200
info@silkem.si

1.4 Emergency Telephone Number

Emergency

112

Manufacturer

+386 2 7991 208 (7h - 15h)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

According to the regulation, the chemical is not classified as hazardous.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]**Hazard statements:**

Not applicable.

Supplemental hazard information (EU):

Not applicable.

Precautionary statements:

Not applicable.

Special provisions

The product is not classified as dangerous according to regulations.

2.3 Other hazards**PBT/vPvB**

No information.

Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

Additional information

The substances in the product are not classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
Boehmite	1318-23-6 215-284-3 - 01-2119555298- 28-0018	>99	/	/	/

3.2 Mixtures

For substances see 3.1.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****General notes**

When in doubt or if feeling unwell seek medical assistance. Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency.

Following inhalation

Remove patient to fresh air - move out of dangerous area. If symptoms develop and persist, seek medical attention.

Following skin contact

Take off all contaminated clothing. If symptoms develop and persist, seek medical attention. Areas of the body that have come into contact with the product must be rinsed with water. Wash contaminated clothes and shoes before reuse.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. In case of doubt or if feeling unwell seek medical help. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed**Following inhalation**

No information.

Following skin contact

No information.

Following eye contact

No information.

Following ingestion

No information.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Full water jet.

5.2 Special hazards arising from the substance or mixture**Hazardous combustion products**

No information.

5.3 Advice for firefighters**Protective actions**

No information.

Special protective equipment for fire-fighters

In case of fire: Wear suitable respiratory equipment - self-contained breathing apparatus and full protective equipment.

Additional information

Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures**For non-emergency personnel****Protective equipment**

Use personal protective equipment (Section 8). Do not breathe dust.

Precautionary measures

Ensure adequate ventilation.

Emergency procedures

No information.

For emergency responders

No information.

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil.

6.3 Methods and material for containment and cleaning up

For containment

Prevent spillage - close holes on damaged container.

For cleaning up

Take up mechanically and collect in suitable container and dispose according to current regulations.

Other information

No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

Ensure adequate ventilation.

Measures to prevent aerosol and dust generation

Prevent dust formation.

Measures to protect the environment

No information.

Other measures

No information.

Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe dust. Use personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep in cool and well ventilated area. Keep in a dry place. Keep away from moisture. Keep away from food, drink and animal feeding stuffs.

Packaging materials

No information.

Requirements for storage rooms and vessels

No information.

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)

Recommendations

See identified uses in Section 1.2.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

No information.

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values

For product

No information.

For components

Name	Type	Exposure route	exp. frequency	Remark	value
Boehmite	Worker	inhalation	long term	/	3.59 mg/m ³
Boehmite	Consumer	oral	long term	/	2.37 mg/kg bw/day

PNEC values

For product

No information.

For components

Name	Exposure route	Remark	value
Boehmite	fresh water	/	74.9 µg/l
Boehmite	water treatment plant	/	20 mg/L

8.2 Exposure controls

Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Do not breathe dust.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

Personal protective equipment

Eye and face protection

If there is risk of splashing into eyes, wear safety glasses with side shields (BS EN ISO 16321-1:2022).

Hand protection

Protective gloves (EN 374).

Appropriate materials

No information

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345).

Respiratory protection

Not needed under normal use and adequate ventilation. In case of insufficient ventilation wear mask with filter P2.

Thermal hazards

No information.

Environmental exposure controls**Substance/mixture related measures to prevent exposure**

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

No information.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties****Physical state**

solid

Colour

white

Odour

no odour

Important health, safety and environmental information

Odour threshold	No information.
Melting point/Freezing point	> 300 °C
Boiling point or initial boiling point and boiling range	No information.
Flammability	(Not flammable.)
Lower and upper explosion limit	(Not explosive.)
Flash point	No information.
Auto-ignition temperature	(Not self-igniting.)
Decomposition temperature	> 340 °C
pH	No information.
Viscosity	No information.
Solubility	No information.
Partition coefficient	No information.

Vapour pressure	No information.
Density and/or relative density	Bulk density: 200 — 1100 kg/m ³
Relative vapour density	No information.
Particle characteristics	No information.

9.2 Other information

Oxidising properties	Not oxidising.
Explosive properties	Product is not explosive.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions occur under normal conditions of storage and use.

10.4 Conditions to avoid

Avoid high temperatures. Boehmite decomposes at temperature > 340°C into water (H₂O) and aluminum oxide (Al₂O₃) without melting.

10.5 Incompatible materials

Acids.
Strong bases.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected.

SECTION 11: TOXICOLOGICAL INFORMATION

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

(a) Acute toxicity

For components

Name	Exposure route	Type	Species	Time	value	Method	Remark
Boehmite	oral	LD ₅₀	rat	/	> 2000 mg/kg bw	/	/
Boehmite	inhalation	LC50	rat	4 h	7.6 mg/l	/	/

(b) Skin corrosion/irritation**For components**

Name	Species	Time	result	Method	Remark
Boehmite	/	/	Non-irritant.	/	/

(c) Serious eye damage/irritation**For components**

Name	Exposure route	Species	Time	result	Method	Remark
Boehmite	/	/	/	Non-irritant.	/	/

(d) Respiratory or skin sensitisation**For components**

Name	Exposure route	Species	Time	result	Method	Remark
Boehmite	-	/	/	Not classified.	/	/

(e) (Germ cell) mutagenicity**For components**

Name	Type	Species	Time	result	Method	Remark
Boehmite	/	/	/	Not mutagenic.	/	/

(f) Carcinogenicity**For components**

Name	Exposure route	Type	Species	Time	value	result	Method	Remark
Boehmite	/	/	/	/	/	Negative	/	/

(g) Reproductive toxicity**For components**

Name	Reproductive toxicity type	Type	Species	Time	value	result	Method	Remark
Boehmite	/	/	/	/	/	Negative.	/	/

Summary of evaluation of the CMR properties

No information.

(h) STOT-single exposure

No information.

(i) STOT-repeated exposure**For components**

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
Boehmite	oral	NOAEL	rat	/	/	/	30 mg/kg bw/day	/	/	chronic
Boehmite	inhalation	NOAEL	rat	/	/	/	70 mg/m ³	/	/	subchronic

(j) Aspiration hazard**For components**

Name	result	Method	Remark
Boehmite	No adverse effect observed.	/	/

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

11.2 Information on other hazards**Endocrine disrupting properties**

The product does not contain substances with the potential for endocrine disorders.

Other information

No information.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity****Acute (short-term) toxicity****For components**

Name	Type	value	Exposure time	Species	organism	Method	Remark
Boehmite	LC ₅₀	100 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
Boehmite	LC ₅₀	100 mg/L	96 h	fish	<i>Pimephales promelas</i>	/	/
Boehmite	EC50	100 mg/L	48 h	daphnia	<i>Daphnia magna</i>	/	/

Chronic (long-term) toxicity

No information.

12.2 Persistence and degradability**Abiotic degradation, physical- and photo-chemical elimination**

No information.

Biodegradation

No information.

12.3 Bioaccumulative potential**Partition coefficient**

No information.

Bioconcentration factor (BCF)

No information.

12.4 Mobility in soil**Known or predicted distribution to environmental compartments**

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

12.5 Results of PBT and vPvB assessment

The substance is not classified as persistent, toxic, or a substance that can accumulate (PBT) or very persistent and very bioaccumulative (vPvB) substance.

12.6 Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

12.7 Other adverse effects

No information.

12.8 Additional information

No information.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product / Packaging disposal****Waste chemical**

Waste should be handled in accordance with local or national regulations.

Waste codes / waste designations according to LoW

No information.

Packaging

Dispose of according to current environmental regulations.

Waste codes / waste designations according to LoW

No information.

Waste treatment-relevant information

Disposal in accordance with the Rules on the management of waste.

Sewage disposal-relevant information

No information.

Other disposal recommendations

Comply with the applicable legislation.

SECTION 14: TRANSPORT INFORMATION**14.1 UN number or ID number**

ADR/RID	IMDG	IATA	ADN
Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.

14.2 UN proper shipping name

ADR/RID	IMDG	IATA	ADN
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable

14.3 Transport hazard class(es)

ADR/RID	IMDG	IATA	ADN
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable

14.4 Packing group

ADR/RID	IMDG	IATA	ADN
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable

14.5 Environmental hazards

ADR/RID	IMDG	IATA	ADN
NO	NO	NO	NO

14.6 Special precautions for user

ADR/RID	IMDG	IATA	ADN
Limited quantities: Not given/not applicable	Limited quantities: Not given/not applicable		Limited quantities: Not given/not applicable

14.7 Maritime transport in bulk according to IMO instruments

ADR/RID	IMDG	IATA	ADN
	Not given/not applicable		

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)
not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents

No information.

Special instructions

No information.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Indication of changes

2.3 Other hazards 3.1 Substances 3.2 Mixtures 6.3 Methods and material for containment and cleaning up 8.2 Exposure controls 9.1 Information on basic physical and chemical properties 9.2 Other information 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 11.2 Information on other hazards 12.6 Endocrine disrupting properties 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Key literature references and sources for data

No information.

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit

OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

No information.