

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

1.1 Product identifier

Product name: Barium carbonate
CAS-No.: 513-77-9
EC-No.: 208-167-3

1.2 Relevant identified uses of the substance or mixture

Identified use: Laboratory chemical

1.3 Details of the supplier of the safety data sheet

Company: NETZSCH-Gerätebau GmbH
Wittelsbacherstraße 42
95100 Selb / Germany

Customer service Phone: +49 9287 881-555

1.4 Emergency Phone: +49 9287 881-174 (during office hours)

Fax: +49 9287 881-505

E-mail Address: service@ngb.netzsch.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms:



Signalword: Warning

Hazard statements: H302 Harmful if swallowed.

Precautionary statements: P262 Do not get in eyes, on skin, or on clothing.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Additional information: -

2.3 Other hazards

All chemicals are potentially dangerous.
They are therefor only be handled by specially trained personnel with the necessary care.

Results of PBT- und vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3. Composition / information on ingredients

3.1 Chemical characterization:

Substances

CAS-No. Description: 513-77-9 barium carbonate

Identification number(s):

EC number: 208-167-3
Formula: BaCO_3
Molar mass [g/mol]: 197,34

4. First aid measures

4.1 Description of first aid measures

General information: In case of complaints consult a physician. Show this safety data sheet to the doctor in attendance. Remove any clothing soiled by the product.

After inhalation: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

After skin contact: Wash off with soap and plenty of water.
If skin irritation continues, consult a doctor.

After eye contact: To be sure rinse opened eye under running water. If there is any trouble seek medical help.

After swallowing: Rinse out mouth and then drink water. Consult a physician.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulty
Coughing
CNS disorders
Irritations
diarrhoea

4.3 Indication of any immediate medical attention and special treatment needed

No relevant information available.

5. Fire-Fighting measures

5.1 Extinguishing agents

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
CO₂, powder or water spray.
Fight larger fires with water spray or alcohol resistant foam.
Product non-combustible.

For safety reasons unsuitable extinguishing agents: For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

In the event of fire development of hazardous combustion gases or vapours possible.

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.
Wear fully protective suit.

Additional information: -

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe dust.
Ensure adequate ventilation.
Avoid formation of dust.

6.2 Environmental precautions

Do not allow to enter sewers / ground water or penetrate the soil.

6.3 Methods and material for containment and cleaning up

Pick up mechanically.
Dispose of the material collected according to regulations.
Dispose contaminated material as waste according to item 13.

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

Keep containers, equipment and working place clean.
Handling corresponding to laboratory safety guidelines.
Ensure good ventilation/exhaustion at the workplace.

Information about fire and explosion protection:

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be safe storage, including any incompatibilities: No special requirements.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: Keep container tightly sealed.

Recommended storage temperature: 15-25°C

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.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: 513-77-9 barium carbonate

WEL (Great Britain)	Long-term value: 0.5 mg/m ³ as Ba
IOELV (EU)	Long-term value: 0.5 mg/m ³ as Ba

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures: Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Individual protection measures: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection: Required when dusts are generated: filter P2.

Protection of hands: Protective gloves:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Material: Nitrile

Eye protection: Tightly sealed goggles

Body protection: Protective work clothing

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

<u>Appearance</u> Form: Colour:	Powder White
Odour:	Odourless
Odour threshold:	No information available.
pH-value (0.016 g/l) at 16 °C:	7-8
<u>Change in condition</u> Melting point / Melting range: Boiling point / Boiling range:	>1450 °C (Decomposition) Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Product is not flammable.
Ignition temperature:	No information available
Self-igniting:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
<u>Explosion limits</u> Lower: Upper:	No information available. No information available.
Oxidizing properties:	No information available.
Vapour pressure:	Not applicable.
Density at 20°C:	4.43 g/cm ³
Bulk density at 20°C:	~350 kg/m ³
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	0.02 g/l
Partition coefficient (n-octanol / water):	Not determined.
<u>Viscosity</u> Dynamic: Kinematic:	No information available. No information available.

9.2 Other information

No further relevant information available.

10. Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

With strong acids.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

In case of fire: see item 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD / LC50 values relevant
for classification:

Oral | LD50 | 418 mg/kg (rat) (RTECS)

Potential health effects

Skin:	May cause skin irritation.
Eyes:	May cause eye irritation.
Inhalation:	May cause irritation of the respiratory tract.
Ingestion	Harmful if swallowed.
Sensitization:	No sensitizing effects known.

CMR effects

Germ cell mutagenicity:	No information available.
Carcinogenicity:	No information available.
Reproductive toxicity:	No information available.

Aspiration hazard:

No aspiration toxicity classification.

Specific target organ toxicity – single exposure:

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity – repeated exposure:

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Additional toxicological information:

After swallowing:

Spasms
Diarrhoea
cardiovascular failure
CNS-disorders

Further information:

The product should be handled with the usual care as necessary for chemicals.

12. Ecological information

12.1 Toxicity

Aquatic toxicity

Fish toxicity	
LC ₅₀	6950 mg/l/96 h (Gambusia affinis)

12.2 Persistence and degradability

Persistence: No data available.

Degradability: Biologic degradation: Methods for the determination of biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Ecotoxicological effects

Remark: Do not allow to enter waters, waste water, or soil!

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: Dispose of residual amounts and non-reusable solutions in accordance with local legal regulations. Waste code must be classified as hazardous.

Uncleaned packaging

Recommendation: Dispose of as unused product

14. Transport information

	ADR	IMDG	IATA
14.1 UN-Number	UN1564	UN1564	UN1564
14.2 UN proper shipping name	1564 BARIUM COMPOUND, N.O.S. (barium carbonate)	BARIUM COMPOUND, N.O.S.	BARIUM COMPOUND, N.O.S.
14.3 Transport hazard class(es) / -label			
14.4 Packing group:	III	III	III
Transport hazard class(es):	6.1 Toxic substances.	6.1 Toxic substances.	6.1 Toxic substances.
Label:	6.1	6.1	6.1
danger symbol:			
14.5 Environmental hazards:	No	No	No

14.6 Special precautions for user

Warning: Toxic substances.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

15. Regulatory information

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

National regulations:

Information about limitation of use: Employment restrictions concerning pregnant and lactating women must be observed.

Employment restrictions concerning juveniles must be observed.

Waterhazard class: Generally not hazardous for water (German regulation).

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

16. Other Information

Guarantee

This information has been compiled to the best of our knowledge; however, we make no claim as to its completeness and it is meant to serve only as a guideline. NETZSCH-Gerätebau GmbH disclaims any liability for damages which may occur in handling or in contact with these chemicals.

Disclaimer

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