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

1.1. Product identifier

Natrii benzoas pulvis

Item No. 06583200

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

Use of the substance/preparation

Manufacture of pharmaceutical products, food additive, Antioxidant, Manufacture of cosmetics, Preservative

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Hänseler AG
Industriestrasse 35
9100 Herisau

Telephone no.	0041 (0)71 353 58 58
E-mail address of person responsible for this SDS	sdb@haenseler.ch

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Warning

Hazard statements

H319	Causes serious eye irritation.

Precautionary statements

P264.1	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients

Molecular weight

Value 144.11 g/mol

Hazardous ingredients

Sodium benzoate

CAS No. 532-32-1
EINECS no. 208-534-8
Registration no. 01-2119460683-35-XXXX
Concentration >= 50 %
Classification (Regulation (EC) No. 1272/2008)
Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, soaked clothing immediately and dispose of safely.

After inhalation

Ensure supply of fresh air. In the event of symptoms take medical treatment.

After skin contact

Consult a doctor if skin irritation persists. Wash off immediately with soap and water and rinse well.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical advice immediately.

After ingestion

Do not induce vomiting. Summon a doctor immediately.

4.2. Most important symptoms and effects, both acute and delayed

Irritaion of respiratory organs, Causes very strong irritations of the eyes, skin and mucous membranes.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, Dry powder, Water spray jet, Extinguish greater fire with water spray or alcohol-resistant foam.

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

If a fire breaks out nearby evolution of dangerous gases possible. In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2)

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus. Wear full protective suit.

Other information

Cool endangered containers with water spray jet. Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep away unprotected persons. Keep away sources of ignition. Avoid dust formation. Use breathing apparatus if exposed to vapours/dust/aerosol. Ensure adequate ventilation.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Advise water authority if spillage has entered water course or drainage system.

6.3. Methods and material for containment and cleaning up

Pick up mechanically. Send in suitable containers for recovery or disposal. Dispose of absorbed material in accordance with the regulations.

6.4. Reference to other sections

Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid dust formation. Provide good ventilation of working area (local exhaust ventilation if necessary).

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take action to prevent static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in original packaging.

Storage classes

Storage class according to TRGS 510	13	Non- combustible solids
Storage category (Switzerland)	11/13	Other solid hazardous substances with classification/labelling hazardous

Further information on storage conditions

Protect from heat and direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection ***

8.1. Control parameters

Derived No/Minimal Effect Levels (DNEL/DMEL)

Sodium benzoate

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term

Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	0.1	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	3	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	62.5	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	0.06	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	1.5	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	31.25	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	16.6	mg/kg/d

Predicted No Effect Concentration (PNEC)

Sodium benzoate

Type of value	PNEC	
Type	Freshwater	
Concentration	0.13	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	1.76	mg/kg

Type of value	PNEC	
Type	Saltwater	
Concentration	0.013	mg/l
Type of value	PNEC	
Type	Marine sediment	
Concentration	0.176	mg/kg
Type of value	PNEC	
Conditions	Intermittend	
Concentration	0.305	mg/l
Type of value	PNEC	
Type	Soil	
Concentration	0.276	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l

8.2. Exposure controls

General protective and hygiene measures

Observe the usual precautions for handling chemicals. Wash hands before breaks and after work. Hold eye wash fountain available.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Particle filter P2; EN 141; EN 143; EN 149

Hand protection ***

The glove material must be sufficient impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location.

Appropriate Material	Butyl rubber - Butyl		
Breakthrough time	>	4	h
Appropriate Material	nitrile rubber - NBR		
Breakthrough time	<	4	h
Appropriate Material	neoprene		
Breakthrough time	>	4	h
Appropriate Material	Fluoro carbon rubber - FKM		
Breakthrough time	>	4	h
Appropriate Material	PVC		
Breakthrough time	>	4	h

Hand protection must comply with EN 374.

Eye protection

Tightly fitting safety glasses; Eye protection must comply with EN 166.

Body protection

protective overalls; Boots

SECTION 9: Physical and chemical properties ***

9.1. Information on basic physical and chemical properties

Physical state	solid
Colour	white
Odour	odourless

Physical state Granules

Melting point

Value	436	°C
Method	OECD 102	

Boiling point or initial boiling point and boiling range

Value	465	°C

Flammability

No data available

Flash point

Value	°C	
Remarks	Not applicable	

Decomposition temperature

Value	450	to	475	°C

pH value

Value	8.0	
Concentration/H2O	10	%

Viscosity

Remarks	No data available

Partition coefficient n-octanol/water (log value)

log Pow	1.88
Source	Analogous

Vapour pressure

Remarks	No data available

Density and/or relative density

Value	1.44	to	1.50	g/cm³
Temperature	20	°C		
Remarks	Relative Density according specification			

Particle characteristics

Type	Min. particle size		
Particle size	>	500	µm

9.2. Other information

Solubility in water

Value	556	g/l

Oxidising properties

evaluation	Not oxidising

Other information ***

Forms esplosive mixture with air are possible.

SECTION 10: Stability and reactivity

10.1. Reactivity

None

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Keep away from sources of heat and ignition. Water. Sensitive to moisture.

10.5. Incompatible materials

Strong oxidising agents, Reactions with strong acids. Salts of metals (iron)

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information ***

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

Acute oral toxicity (Components)

Sodium benzoate

Species	rat		
LD50	>	2000	mg/kg

Acute dermal toxicity (Components)

Sodium benzoate

Species	rat		
LD50	>	2000	mg/kg

Acute inhalative toxicity (Components)

Sodium benzoate

Species	rat		
LC50		12.2	mg/l
Administration/Form	Dust/Mist		

Skin corrosion/irritation (Components)

Sodium benzoate

Species	rabbit
evaluation	non-irritant
Method	OECD 404

Serious eye damage/irritation (Components)

Sodium benzoate

Species	rabbit
evaluation	strongly irritant
Method	OECD 405

Sensitization (Components)

Sodium benzoate

Species	mouse
evaluation	non-sensitizing
Method	OECD 429

Mutagenicity (Components)

Sodium benzoate

Species	Salmonella typhimurium
evaluation	No mutagenicity in the Ames-test.

Sodium benzoate

Species	Escherichia coli
evaluation	No mutagenicity in the Ames-test.

Sodium benzoate

Species	hamster
evaluation	Information on genotoxicity in vitro available.

Method	OECD 473

Sodium benzoate

Species	Human
evaluation	Information on genotoxicity in vitro available.
Method	OECD 479

Sodium benzoate

Species	Human
evaluation	Information on genotoxicity in vitro available.
Method	OECD 487

Sodium benzoate

Species	rat
evaluation	No experimental information on genotoxicity in vitro available.
Method	OECD 475

Reproduction toxicity (Components)

Sodium benzoate

evaluation	Based on available data, the classification criteria are not met.

Carcinogenicity (Components)

Sodium benzoate

Species	rat		
Dose	>=	20000	ppm(m)
evaluation	Based on available data, the classification criteria are not met.		

Specific Target Organ Toxicity (STOT) (Components)

Sodium benzoate

Remarks	Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties with respect to humans

This substance does not have endocrine disrupting properties with respect to humans.

Experience in practice

Inhalation can cause damage to the respiratory tract or lungs.

SECTION 12: Ecological information ***

12.1. Toxicity

Fish toxicity (Components)

Sodium benzoate

Species	Fathead minnow (Pimephales promelas)		
LC50	484		mg/l
Duration of exposure	96	h	

Sodium benzoate

Species	zebra fish (Brachydanio rerio)		
NOEC	10		mg/l
Duration of exposure	144	h	

Daphnia toxicity (Components)

Sodium benzoate

Species	Daphnia magna		
EC50	>	100	mg/l
Duration of exposure	96	h	
Method	OECD 202		

Algae toxicity (Components)

Sodium benzoate

Species	Pseudokirchneriella subcapitata		
EC50	> 30.5		mg/l
Duration of exposure	72	h	

Sodium benzoate

Species	Pseudokirchneriella subcapitata		
NOEC	0.09		mg/l
Duration of exposure	72	h	

Sodium benzoate

Species	Desmodesmus subspicatus		
EC10	6.5		mg/l
Duration of exposure	72	h	
Method	OECD 201		

12.2. Persistence and degradability

Biodegradability (Components)

Sodium benzoate

Value	85	to	84	%
Duration of test	28	d		
evaluation	Readily biodegradable			
Method	OECD 301 B			

Sodium benzoate

Value	50	to	97	%
Duration of test	60	Days		
evaluation	Readily biodegradable			
Remarks	anaerob			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log value)

log Pow	1.88
Source	Analogous

Octanol/water partition coefficient (log Pow) (Components)

Sodium benzoate

log Pow	-2.27

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment ***

The Substance does not meet PBT-criteria.
This substance does not meet the vPvB-criteria.

12.6 Endocrine disrupting properties

Endocrine disrupting properties with respect to the envrionment

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

General information / ecology

Do not allow it to reach ground water, water bodies or sewage system. Product is slightly hazardous to water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

EWC waste code No not dispose with rubbish.
Disposal in compliance with local and national regulations.
EWC waste code Should not be released into the sanitary sewer system.

Disposal recommendations for packaging

Dispose of as unused product.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.

SECTION 15: Regulatory information

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

Water Hazard Class (Germany)

Water Hazard Class (Germany) WGK 1
Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H319 Causes serious eye irritation.

CLP categories listed in Chapter 3

Eye Irrit. 2 Eye irritation, Category 2

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.