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

1.1 Product identifier

Product name:	Benzoic Acid
CAS-No.:	65-85-0
EC-No.:	200-618-2

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

STOT RE 1	H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.
Eye Dam. 1	H318 Causes serious eye damage.
Skin Irrit. 2	H315 Causes skin irritation.

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: Danger

Hazard statements:	H315 Causes skin irritation. H318 Causes serious eye damage. H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.
Precautionary statements:	P260 Do not breathe dust. P280 Wear protective gloves / eye protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P314 Get medical advice/attention if you feel unwell.
Additional information:	-

2.3 Other hazards

All chemicals are potentially dangerous.
They are therefore 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:	65-85-0 Benzoic acid

Identification number(s):

EC number:	200-618-2
Formula:	$C_7H_6O_2$
Molar mass [g/mol]:	122,12

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. Consult a physician.
After skin contact:	Wash off with soap and plenty of water. If skin irritation continues, consult a doctor.
After eye contact:	Rinse immediately for 15 minutes with plenty of water with the eyelid held wide open. Seek medical advice.
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

Irritations, Coughing, Headache, Gastric or intestinal disorders
Nausea, Vomiting, diarrhoea
Hazards
Danger of impaired breathing.
Risk of serious damage to eyes.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Fire-Fighting measures

5.1 Extinguishing agents

Suitable extinguishing agents: CO_2, powder, foam or water spray

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

Flammable.
In the event of fire development of hazardous combustion gases or vapours possible.
Risk of dust explosion.
Vapors are heavier than air and spread over the ground.

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.

Additional information: -

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the eyes and skin.
Do not breathe 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.

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

Provide suction extractors if dust is formed. Keep containers, equipment and working place clean.

Information about fire and explosion protection:

-

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. Store in dry conditions.
Recommended storage temperature:	According to product specification.

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:	Not required.
Additional information:	The lists valid during the making were used as basis

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Avoid contact with the eyes and skin. Do not breathe dust. Wash hands before breaks and at the end of work.
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 shouldbe enquired at the respective supplier.
Respiratory protection:	Required when dusts are generated: filter P2.
Protection of hands:	Protective gloves: Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. 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

Appearance Form: Colour:	 Powder white to yellowish
Odour:	Odourless
Odour threshold:	No information available.
pH-value (10 g/l) at 20 °C:	2.5 - 3.5
Change in condition Melting point / Melting range: Boiling point / Boiling range:	 ca. 122 °C ca. 250 °C
Flash point:	121 °C
Flammability (solid, gaseous):	No information available
Ignition temperature:	570 °C
Decomposition temperature:	No information available
Self-igniting:	No information available
Danger of explosion:	Not classified als explosive.
Explosion limits Lower: Upper:	 No information available. No information available.
Oxidizing properties:	No information available.
Vapour pressure at 20°C:	0.001 hPa
Density at 20°C:	1.32 g/cm³
Bulk density:	ca. 500 kg/m³
Vapour density:	No information available
Evaporation rate:	No information available
Solubility in / Miscibility with water 20°C:	2.9 g/l
Partition coefficient (n-octanol / water):	1.87 log POW (exp. (TOXNET))
Viskosity Dynamic: Kinematic:	 No information available. No information available.

9.2 Other information

Benzoic acid sublimes shortly above the melting point.

10. Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and preparations: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

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

Strong oxidizing agents, fluorine, oxygen, strong bases, strong reducing agents.

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 | LD_{50}* | 1700 mg/kg (rat) (TOXNET)
	Dermal | LD_{50} | > 10000 mg/kg (rabbit) (TOXNET)
Specific symptoms in biological assay:	Eye irritation test (rabbit): severe irritations.

Potential health effects

Skin:	Slight irritations. Irritant to skin and mucous membranes.
Eyes:	Strong irritant with the danger of severe eye injury.
Inhalation:	After inhalation of dusts: Irritations in the respiratory tract, coughing, absorption.
Ingestion	Irritations in the mouth, throat, oesophagus, gastrointestinal tract.
Sensitization:	Sensitization possible in prediposed persons.

CMR effects

Germ cell mutagenicity:	No known significant effects or critical hazards.
Carcinogenicity:	No known significant effects or critical hazards.
Reproductive toxicity:	No known significant effects or critical hazards.

Aspiration hazard:

Not applicable.

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:

Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.

Additional toxicological information:

After swallowing:
irritations in the mouth, throat, oesophagus, gastrointestinal tract.
Headache
Nausea
Vomoting
Diarrhoea

Further information:
Further hazardous properties cannot be excluded.
The product should be handled with the usual care as necessary for chemicals.

12. Ecological information

12.1 Toxicity

Aquatic toxicity

Daphnia toxicity:	
EC50	102 mg/l/24 h (Daphnia magna) (Lit.) 252 mg/l/48 h (Tetrahymena pyriformis) (ECOTOX Database)

12.2 Persistence and degradability

Persistence: No data available.

Degradability: Biodegradation: > 70% / 5d OECD-301D
The product is easily biodegradable.

12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected (log POW ≤4).

12.4 Mobility in soil

No further relevant information available.

Ecotoxical 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 codes must be assigned by the user based on the application for which the product was used.

Waste code must be classified as hazardous.

Uncleaned packaging

Recommendation: Disposal same as for unused product.

14. Transport information

	ADR	IMDG	IATA
14.1 UN-Number	Void	Void	Void
14.2 UN proper shipping name	Void	Void	Void
14.3 Transport hazard class(es) / -label			
14.4 Packing group:	Void	Void	Void
Transport hazard class(es):	Void	Void	Void
Label:	Void	Void	Void
danger symbol:			
14.5 Environmental hazards:	No	No	No

14.6 Special precautions for user

Not applicable.

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 juveniles must be observed.

Waterhazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.

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.

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