
Material Safety Data Sheet

Product Name	<u>Benzoic Acid</u>
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:**Product Description:** Benzoic Acid**Synonyms:** Benzenecarboxylic acid, Benzenemethanoic acid, Phenylcarboxylic acid, Phenylmethanoic acid, Benzeneformic acid, Carboxybenzene**CAS-No:** 65-85-0**EC-No.:** 200-618-2**Molecular Formula:** C₇H₆O₂**REACH Registration No:** A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.**1.2. Relevant identified uses of the substance or mixture and uses advised against:****Recommended Use:** Laboratory chemicals, Manufacture of substances**1.3. Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**
184-186/P, Chacharwadi Vasna,
Sarkhej-Bavla Highway,
Ta.: Sanand, Dist.: Ahmedabad,
Email: info@finarchemicals.com
Web: www.finarchemicals.com
- **E-Mail Address** safety@finarchemicals.com; info@finarchemicals.com

1.4. Emergency Telephone Number:

- For Emergency contact on: +91 - 2717 - 616 717
- Registered office No: +91 - 79 – 40040085

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SECTION 2: HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture:****Classification (REGULATION (EC) No 1272/2008)**

Skin irritation, Category 2, H315

Serious eye damage, Category 1, H318

Specific target organ toxicity - repeated exposure, Category 1, Inhalation, Lungs, H372

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label Elements:**Labeling according Regulation (EC) No 1272/2008****Pictogram****Signal word Danger**

Hazard statement(s)

H315 Causes skin irritation.

H318 Causes serious eye damage.

H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

Precautionary statement(s)

Prevention

P280 Wear eye protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and 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.

Reduced labelling (≤125 ml)

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Pictogram



Signal

Danger

Hazard statement(s)

H318 Causes serious eye damage.

H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

Precautionary statement(s)

P280 Wear eye 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.

2.3. Other Hazards: None Known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: Benzoic Acid

3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
Benzoic Acid	65-85-0	200-618-2	>95

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

- General advice**

First aider needs to protect himself.

- If inhaled**

Fresh air. Call in physician.

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- **If Contact with skin**
Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- **In case of eye contact**
Rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
- **If swallowed**
Immediately make victim drink water (two glasses at most). Consult a physician.

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

Diarrhoea, Nausea, Vomiting, Stomach/intestinal disorders, Irritation and corrosion, Cough
Irritation and corrosion
Risk of serious damage to eyes.

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media:**

Suitable Extinguishing Media- Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable Extinguishing Media- For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture:

Combustible.

Vapours are heavier than air and may spread along floors.

Risk of dust explosion.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3. Advice for firefighters:

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus.

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further Information:

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures:**

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2. Environmental precautions:

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dust.

6.4. Reference to other sections:

For disposal see Sections 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling:**

Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Avoid dust formation. Do not breathe dust.

7.2. Conditions for safe storage, including any incompatibilities:

Keep in a dry and well-ventilated place. Keep container tightly closed.
Keep away from heat and sources of ignition.

7.3. Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Contains no substances with occupational exposure limit values.

8.2. Exposure Controls:

- **Appropriate Engineering Controls:**

Technical measures and appropriate working operations should be given priority over the use of personal

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protective equipment.

See section 7.1.

Personal Protective Equipment:

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.

Eye & Face Protection

Tightly fitting safety goggles

Body Protection

Protective clothing

Respiratory Protection

Required when dusts are generated.

Recommended Filter type: Filter P 2(acc. To DIN 3181) for Solid and Liquid particles of harmful substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental Exposure Controls

Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

- **Appearance:** White
- **Physical State:** Solid
- **Odor:** Characteristic
- **pH:** 2.5 – 3.5 at 20°C (Saturated Solution)
- **Melting Point:** 121 - 123°C
- **Ignition Temperature:** 570°C
- **Vapor Pressure:** 0.001 hPa at 20°C
1.3 hPa at 96 °C
- **Relative Vapor Density:** 4.21

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- **Density:** 1.321 g/cm³ at 20°C
- **Volatility:** No data available
- **Bulk Density:** ca. 500 kg/m³
- **Odor Threshold:** No data available
- **Viscosity, dynamic:** No data available
- **Water/Oil Dist. Co eff.:** No data available
- **Ionicity (in Water):** No data available
- **Partition Co-efficient: n-octanol/water:** log Pow:1.88
(experimental)
(IUCALD) Bioaccumulation is not expected. (Lit.)
- **Boiling Point/Range:** 249°C at 1.013 hPa
- **Flash Point:** 121°C
- **Sublimation Point:** >100°C
- **Specific Gravity:** No data available
- **Water Solubility:** 2.9 g/l at 25°C

9.2. Other information:

Molecular Formula: C₇H₆O₂

Molecular Weight: 122.12 g/mol

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Risk of dust explosion.

Forms explosives mixtures with air on intense heating.

A range from approx. 15 kelvin below the flash point is to be rated as critical.

10.2. Chemical stability:

Stable under normal conditions.

10.3. Possibility of hazardous reactions:

Risk of ignition or formation of inflammable gases or vapours with: Fluorine

Exothermic reaction with: bases, Strong oxidizing agents, Strong bases, nitrites, strong reducing agents

10.4. Conditions to avoid:

Incompatible products. Avoid dust formation.

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10.5. Incompatible materials:

Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents, Metals

10.6. Hazardous decomposition products:

Carbon monoxide (CO), Carbon dioxide (CO₂)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Oral toxicity

Rat: >2000 mg/kg

(Lit.)

Symptoms: Nausea, Vomiting, Irritation of mucous membranes

Nausea, Vomiting, Irritation of mucous membranes

Acute Inhalation Toxicity

LC50 Rat: > 12.2 mg/l; 4 h ; dust/mist

(External MSDS)

Symptoms: Cough, Possible damages:., mucosal irritations

Acute Dermal toxicity

LD50 Rabbit: > 5,000 mg/kg

(IUCLID)

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Rabbit

Result: Severe irritations

(RTECS)

Causes serious eye damage.

Sensitisation

Sensitisation possible in predisposed persons.

Germ cell mutagenicity

Genotoxicity in vitro

Mutagenicity (mammal cell test):

Result: negative

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(IUCLID)

Ames test

Result: negative

(Lit.)

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Exposure routes: Inhalation

Target Organs: Lungs

Aspiration hazard

No data available

11.2 Further Information

After uptake of large quantities:

Stomach/intestinal disorders, Diarrhoea

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Toxicity to fish:

LC50 *Lepomis macrochirus* (Bluegill sunfish): 44.6 mg/l; 96 h

(External MSDS)

Toxicity to daphnia and other aquatic invertebrates:

EC50 *Daphnia magna* (Water flea): 102 mg/l; 24 h

(Lit.)

EC50 *Tetrahymen pyriformis*: 252 mg/l; 48 h

(ECOTOX Database)

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Toxicity to algae:

IC50 algae: 10 - 100 mg/l; 72 h

(External MSDS)

Toxicity to bacteria

microtox test EC50 Photobacterium phosphoreum: 17 mg/l; 30 min

(Lit.)

EC50 activated sludge: > 1,000 mg/l; 3 h

OECD Test Guideline 209

12.2 Persistence and degradability:

Biodegradability

> 71 %; 5 d

OECD Test Guideline 301D

Readily biodegradable

> 90 %; 2 d

OECD Test Guideline 302B

Readily eliminated from water

12.3 Bioaccumulate potential:

Partition Coefficient: - n-Octanol/water

log Pow: 1.88

(experimental)

(IUCLID) Bioaccumulation is not expected. (Lit.)

12.4 Mobility in soil:

No data available

12.5 Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

12.6 Other adverse effects

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Waste material must be disposed of in accordance with the national and local regulations.

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Leave chemicals in original containers. No mixing with other waste.

Handle uncleaned containers like the product itself.

SECTION 14: Transport information

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	Not classified as dangerous in the meaning of transport regulations.		
14.2 Proper shipping name	Not classified as dangerous in the meaning of transport regulations.		
14.3 Class	Not classified as dangerous in the meaning of transport regulations.		
14.4 Packing group	Not classified as dangerous in the meaning of transport regulations.		
14.5 Environmentally hazardous	Not classified as dangerous in the meaning of transport regulations.		
14.6 Special precautions for user	Not classified as dangerous in the meaning of transport regulations.		
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code			
Not Revalent			

SECTION 15: Regulatory information

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

National Legislation

Storage class 6.1C

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H372 Causes damage to organs through prolonged or repeated exposure if inhaled.

Training advice

Provide adequate information, instruction and training for operators.

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Labelling

Hazard pictograms



Signal word: Danger

Hazard statements

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Precautionary statements

Prevention

P280 Wear eye protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and 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.

References: Not available

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