

Safety Data Sheet

1. Chemical product and company identification

Product name : Benzoic acid

Company information

Name of manufacturer : KANTO CHEMICAL CO., INC.
Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP
Name of section : Business Administration Department, Reagent Division
Telephone number : +81-3-6214-1090
Facsimile number : +81-3-3241-1047
Mail address : BC32@kanto.co.jp
Reference No : 04115-13
Recommended uses and restrictions : The Japanese Standards of Quasi-Drug Ingredients

2. Hazards identification

GHS classification

Health hazards	Serious eye damage/eye irritation	Category 1
	Reproductive toxicity	Category 2
	Specific target organ toxicity (repeated exposure)	Category 2 (upper airway)
Environmental hazards	Aquatic acute	Category 3

Hazard pictograms



Signal word : Danger

Hazard statements : Causes serious eye damage
Suspected of damaging fertility or the unborn child
May cause damage to organs (upper airway) through prolonged or repeated exposure
Harmful to aquatic life

Precautionary statements

Prevention : Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

Response : IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Immediately call a POISON CENTER or doctor.
Get medical advice/attention if you feel unwell.



Storage : Store locked up.

Disposal : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

3. Composition/information on ingredients

Distinction of substance or mixture : Substance

Chemical name	Concentration (%)	Formula	TSCA	EC-No.	CAS RN
Benzoic acid	≥ 99.5	C ₇ H ₆ O ₂	Listed	200-618-2	65-85-0

4. First aid measures

First aid measures

First-aid measures after inhalation : Remove the victim to fresh air, and make him blow his nose and gargle. If necessary, get medical treatment.

First-aid measures after skin contact : Wash the affected areas under running water.

First-aid measures after eye contact : Wash the affected areas under running water for at least 15 minutes. Get medical treatment.

First-aid measures after ingestion : Give the victim water or salt water and induce vomiting. If necessary, get medical attention.

Personal Protection in First Aid and Measures : Rescuers should wear proper protective equipment like rubber gloves, goggles.

5. Fire fighting measures

Suitable extinguishing media : Dry chemical powder, carbon dioxide, dry sand, foam

Unsuitable extinguishing media : Water spray

Firefighting instructions : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.
Fight fire from windward.
Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Foam extinguisher is effective for a large scale fire.

Personal protection (Emergency response) : Wear breathing apparatus.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

General measures : Wear proper protective equipment and avoid contact with skin and inhalation of dust. Conduct operations from upwind and evacuate people downwind.

Environmental precautions

Environmental precautions : Attention should be given to avoid damage to the environment by flowing of spillage to rivers.



Methods and Equipment for Containment and Cleaning up

For containment : Sweep up in a chemical waste container. Flush contaminated area with copious amounts of water.

Prevention Measures for Secondary Accidents : Remove nearby sources of ignition and prepare extinguishing media.

7. Handling and storage**Handling**

Technical measures : Wear appropriate protective equipment to avoid contact with skin or inhalation of dust.

Precautions for safe handling : Avoid formation of dust and aerosols.
Do not allow contact with oxidizing substances.

Storage

Storage conditions : Store in a dark, cool place and tightly closed.

Material used in packaging/containers : Glass, polyethylene, polypropylene.

8. Exposure controls / Personal protection equipment

ACGIH TWA	0.5 mg/m ³ (IFV)
Remark (ACGIH)	Skin

Appropriate engineering controls : Install a local ventilation system in case of dusty condition.

Protective equipment

Respiratory protection : Dust mask

Hand protection : Impervious protective gloves

Eye protection : Safety goggles

Skin and body protection : Protective clothing, protective boots

9. Physical and chemical properties

Physical state : Solid

Color : White

Odor : Odorless or slight benzaldehyde odor

pH : 2.8 (saturated aqueous solution, 25°C)

Melting point : 122 ° C

Freezing point : No data available

Boiling point : 249.2 ° C

Flash point : 121 ° C (C.C.)

Auto-ignition temperature : 570 ° C

Decomposition temperature : No data available

Flammability : Flammable

Vapor pressure : 0.11 Pa (20°C)

Relative density : No data available

Density : 1.321 g/cm³ (20°C)

Relative gas density : 4.2



Solubility	: Water: 3 g/L (20°C) Organic solvent: Readily soluble in acetone, ethanol and diethyl ether.
Partition coefficient n-octanol/water (log Pow)	: 1.88
Explosive limits (vol %)	: No data available
Viscosity, kinematic	: No data available
Particle characteristics	: No data available

10. Stability and reactivity

Reactivity	: May react with oxidizing substances.
Chemical stability	: Stable under normal conditions. Sublimation begins at about 100 °C.
Possibility of hazardous reactions	: Stable under normal conditions of use.
Conditions to avoid	: Light, heat.
Incompatible materials	: Oxidizing agent.
Hazardous decomposition products	: Carbon monoxide.

11. Toxicological information

Acute toxicity (oral)	: No classification rat LD50=2530 mg/kg
Acute toxicity (dermal)	: No classification rabbit LD50>2000 mg/kg
Acute toxicity (inhalation)	: No classification (gas) Classification not possible (vapor) No classification (dust, mist) rat LC50>12.2 mg/L/4h
Skin corrosion/irritation	: Classification not possible It is reported that there was slight irritation or no irritation in tests according to the test guidelines. On the other hand, it is reported that irritation was observed in 18 out of 614 persons in a patch test using ethanol or cream containing 0.05% of this substance, and urticaria was found in 7 out of 32 persons in a patch test using petrolatum containing 0.5% of this substance. Therefore, it was classified as "Classification not possible."
Serious eye damage/irritation	: Causes serious eye damage It was classified in category 1 because it is reported that it was severely irritating or corrosive in tests according to the test guidelines.
Respiratory sensitization	: Classification not possible
Skin sensitization	: Classification not possible Many data are reported suggesting that it was not sensitizing in tests according to the guidelines. On the other hand, as for effects in humans, there are reports of sensitization, such as urticaria observed in 7 out of 32 persons in a patch test using petrolatum containing 0.5% of this substance. Therefore, it was classified as "Classification not possible."
Germ cell mutagenicity	: Classification not possible Classification not possible due to lack of data. As for in vitro, it was reported negative results in a bacterial reverse mutation test and a chromosomal aberration test with cultured mammalian cells.



Carcinogenicity	: Classification not possible This substance is classified in Group D (Not classifiable as to human carcinogenicity) by EPA.
Reproductive toxicity	: Suspected of damaging fertility or the unborn child It is reported that in developmental toxicity tests with rats in the oral route (gavage), there were increased resorptions, and in a developmental toxicity test with hamsters in the oral route (gavage), increased resorptions and increased malformations were observed. Therefore, it was classified in category 2.
STOT-single exposure	: Classification not possible It was reported that in rats in the oral route (dose unknown), diarrhea, muscular weakness, tremors, hyperactivity, and emaciation were observed. In addition, it was reported that in inhalation exposure (dust) in rats, the animals showed occasional increased motor activity and salivation at the concentration (12.2 mg/L) above the guidance value range but recovered later. However classification not possible due to lack of data.
STOT-repeated exposure	: May cause damage to organs (upper airway) through prolonged or repeated exposure It was reported that in a test with rats given 4-week inhalation exposure to the aerosol of this substance, upper respiratory tract inflammation was observed at the concentration (converted guidance value concentration: 0.078 mg/L) within the guidance value range for category 2. Therefore, it was classified in category 2 (upper respiratory).
Aspiration hazard	: Classification not possible

12. Ecological information

Ecotoxicity

Aquatic acute	: Harmful to aquatic life Lepomis macrochirus LC50=44.6 mg/L/96h
Aquatic chronic	: No classification

Persistence and degradability

Readily biodegradable
BOD : 85%

Bioaccumulative potential

Low bioconcentration
log Pow : 1.88

Mobility in soil

No additional information available

Hazardous to the ozone layer

Ozone	: Classification not possible
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13. Disposal considerations

Ecological waste information	: Mixed with flammable organic solvents and burn in a chemical incinerator equipped with an afterburner and a scrubber. Or entrust approved waste disposal companies with the disposal.
Contaminated container and packaging	: In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.



14. Transport information

International Regulations

Transport by sea(IMDG)

UN-No. (IMDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Packing group (IMDG)	: Not applicable
Transport hazard class(es) (IMDG)	: Not applicable

Air transport(IATA)

UN-No. (IATA)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Packing group (IATA)	: Not applicable
Transport hazard class(es) (IATA)	: Not applicable

Marine pollutant	: Not applicable
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15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

16. Other information

Data sources	: NITE Chemical Risk Information Platform (NITE-CHRIP), National Institute of Technology and Evaluation. ICSC Card (2009) . ECHA (European Chemicals Agency).
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The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product. The Safety Data Sheet(SDS) is prepared based on JIS Z7253.

