Benzoic Acid

Version: 2.0 / EN
Revision date: Nov. 13, 2024

SECTION 1: Identification

1.1 Product identifier
Benzoic Acid Ultra Pure Flake

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

1.2.1 Relevant identified uses
Used in the synthesis as an intermediate for salts and esters, and as a chain stopper for alkyd resins.
Manufacture of substances

1.2.2 Uses advised against
No specific uses advised against have been identified.

1.3 Details of the supplier of the safety data sheet

Velsicol Chemical LLC
10400 W. Higgins Road, Suite 303
Rosemont, Illinois 60018 USA
Phone: 877-847-8351
Email: customerservice@velsicol.com

Velsicol Chemical Ireland
Charter House
5 Pembroke Row
Dublin 2
Republic of Ireland Email:
customerservice@velsicol.com

1.4 Emergency telephone number
Outside the continental U.S.A. call CHEMTREC 1-800-424-9300 (24 hours)
In the continental U.S.A. call CHEMTREC 1-800-424-9300 (24 hours)

SECTION 2: Hazard(s) identification

2.1 Hazard classification and Hazard statement(s)
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Hazard classification	Hazard statement
Eye Damage, category 1	Causes serious eye damage.
Skin Irritation, category 2	Cause skin irritation.

2.2 Precautionary statements
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Use only outdoors or in a well-ventilated area. Wash contaminated skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor/ physician.

Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/ container to an approved waste disposal plant.

2.3 Signal Word
Danger

2.4 Pictograms

2.5 Other hazards
None known

SECTION 3: Composition/information on ingredients:

3.1 Substances

Chemical Name	Synonyms	CAS No.	EC NO.	% by Weight
Benzoic Acid	Benzene carboxylic acid Benzene formic acid	65-85-0	200-618-2	99.5

3.2 Mixtures
Not applicable

SECTION 4: First-aid measures

4.1 Description of first aid measures

4.1.1 General information:
Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator). Move out of dangerous area if irritation or other symptoms occur from any route of exposure.

See Section 11 for toxicological information.

4.1.2 Following inhalation:
If inhaled, move to fresh air. If breathing is difficult, give oxygen. Seek medical attention.

4.1.3 Following skin contact:
Flush immediately the area with soap and plenty of water. Remove contaminated clothing and shoes. Seek medical attention.

4.1.4 Following eye contact:
Check for and remove any contact lenses. Flush immediately with plenty of water for at least 15 minutes. Seek medical attention.

4.1.5 Following ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

4.1.6 Self-protection of the first aider:
Wear protective gloves/protective clothing/eye protection/face protection if possible. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Get medical attention immediately if exposure occurs from any route.

4.1.7 Notes for the doctor:
Not available.

4.2 Most important symptoms and effects, both acute and delayed
See section 2 and/or section 11

4.3 Indication of any immediate medical attention and special treatments needed
No data available

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Flammability Properties: Flash point: 121°C (250°F) CC, Auto ignition temperature: 570°C (1058°F). Combustible dust.

Suitable extinguishing media: dry chemicals, water spray or alcohol-resistant foam, and CO2 (may be ineffective on larger fires due to a lack of cooling capacity).

Unsuitable extinguishing media: Do not use water jet or any method that will create dust clouds.

5.2 Special hazards arising from the substance or mixture
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Vapor from molten benzoic acid may form explosive mixture with air.

Products of combustion are carbon oxides (CO, CO2).

5.3 Advice for fire fighters
Firefighters and others who may be exposed to products of combustion should wear full firefighting turn out gear and self-contained breathing apparatus (SCBA). Firefighting equipment should be thoroughly decontaminated after use.

5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

Removal of ignition sources, provision of sufficient ventilation, avoid raising dust. Evacuate the danger area and consult an expert.

6.2 Environmental precautions
Do not allow to enter sewers / surface or ground water.
In case of spillage to water course or public sewers inform responsible authorities.

6.3.1 Methods and materials for containment and clearing up
Contain spill. Use spark-proof and explosion-proof tools to put the spilled solid in a convenient waste disposal container. Neutralize the residue with a dilute solution of sodium carbonate. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

6.4 References to other sections
See sections 8 and 13 for further advice.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures: Do not handle until all safety precautions have been read and understood; Wear suitable protective clothing, gloves and eye/face protection (see Section 8).

Measures to prevent aerosol and dust generation: Provide ventilation to minimize exposure. Avoid raising dust. Do not breathe dust/fumes/gas/mist/vapours/spray.

Measures to protect the environment: Avoid release to the environment.

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding exposure through any route. Keep away from sources of ignition and avoid raising dust.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, and well-ventilated area away from sources of ignition; Keep container tightly closed.

7.3 Specific end uses(s)

No data available

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

No national limits have been set for Occupational Exposure Limit (OEL) values.
PNOS: ACGIH has recommended the following exposure limits for Particulates (insoluble or poorly soluble) not otherwise specified (PNOS): 10 mg/m3 TWA (inhalable particles), 3mg/m3 TWA (respirable particles). OSHA exposure limits for Particulates not otherwise regulated are 15 mg/m3 TWA (total dust) and 5mg/m3 TWA (respirable fraction).

8.2 Exposure controls

Ventilation must be adequate to maintain an ambient workplace atmosphere below the exposure limits outlined in the SDS. Eliminate ignition sources (e.g., spark, static buildup, and heat, etc.).

8.2.1 Appropriate engineering controls:

Always provide effective general and, when necessary, local exhaust ventilation to draw dust and vapor away from workers to prevent routine inhalation.

8.2.2 Personal protective equipment (PPE):

Do not eat, drink, or smoke whilst working. Keep away from foodstuffs, beverages and feed.
Remove all contaminated clothing. Wash hands before breaks and at the end of work.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29 CFR).

Eye and face protection

Safety glasses with side shields (or goggles) and a face shield should be worn when handling this substance. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Wear chemical resistant (impervious) gloves and a complete personal protective suit. Gloves and cloth must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

8.3 Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	White flake
Odour:	Slight mild odour
Odour threshold:	no data available
pH:	2.5 - 3.5 at 20 °C (68 °F, saturated solution)
Melting/Freezing point:	121 - 125 °C
Boiling point:	249 °C (480 °F) @ 760 mm Hg
Flashpoint, CC:	121.9°C (251.4 °F)
Evaporation rate:	Not available
Flammability:	Not flammable
Vapor pressure:	0.0011 hPa @ 20°C (68 °F)
Vapour density:	4.22 (Air=1)
Specific density:	1.321 at 20°C
Refractive index:	No data available
Solubility in water:	3.5 g/l at 25 °C (77 °F)
Solubility in other solvents:	No data available
Partition coefficient:	log Pow:1.88
Volatile by weight	Not available
Auto ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity	Not available
Explosive properties	Not considered to be explosive
Oxidising properties	Not considered to be oxidising
Dissociation Constant:	Not available
Molecular Weight	122.12

9.2 Other information
Some of the number specified are typical values and do not represent a specification.

SECTION 10: Stability and reactivity

10.1 Reactivity
Not a reactive substance and no reactive hazards are expected.

10.2 Chemical stability
The product is stable.

10.3 Possibility of hazardous reactions
No hazardous reactions expected under normal conditions of use.

10.4 Conditions to avoid
Excessive heat and ignition sources. Avoid static discharge. Avoid dust formation.

10.5 Incompatible materials
Strong oxidizing agents, Strong bases, Strong reducing agents. Avoid contact with metals.

10.6 Hazardous decomposition products
Carbon dioxide, carbon monoxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat - > 2,250 mg/kg; LC50 Inhalation - rat - 4 h - > 12.2 mg/l; LD50 Dermal - rabbit - > 2,000 mg/kg

Skin corrosion/irritation
Mild skin irritation – rabbit, 24 h

Serious eye damage/irritation
Risk of serious damage to eyes - rabbit.

Respiratory/skin sensitisation
No evidence of skin sensitization (Guinee Pig).

Germ cell mutagenicity
Not classified

Carcinogenicity
Not classified. Not listed or regulated by IARC, NTP, OSHA, or ACGIH

Reproductive toxicity
Not classified.

STOT-single exposure
Not classified

STOT-repeated exposure
Not classified

Aspiration hazard
Not classified.

Additional Information
RTECS: DG0875000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity
Fish: 96 hr LC50 (Bluegill Sunfish): 44.6mg/L; 96 hr LC50 (Rainbow Trout): 47.3mg/L; Chronic NOEC >120 mg/L (28 days)

Invertebrates: 48 hr EC50: >100mg/L; 24 hr EC50: 102-500 mg/L; Chronic NOEC: >=25 mg/L (21 days)

Algae: 72 hr EC50: >33.1 mg/L; Chronic NOEC: EC10 = 3.4 mg/L (72 hr)

12.2 Persistence and degradability
Readily biodegradable and therefore is not Persistence.

12.3 Bioaccumulative potential

Log Kow = 1.88, Bio-concentration factor (BCF): 5.3, not bio-accumulative.

12.4 Mobility in soil
No specific information available

12.5 Results of PBT and vPvB assessment
not PBT or vPvB

12.6 Other adverse effects
No information available.

SECTION 13: Disposal considerations

Incinerate in a properly permitted facility in accordance with federal, state and local regulation or regional authorities.

SECTION 14: Transport information

DOT (US): When shipped over 5000 lbs (2270 kg) in a single package:
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Benzoic acid)
Reportable Quantity (RQ): 5000 lbs (2270 kg)

Marine pollutant: No
Poison Inhalation Hazard: No

This substance is not a dangerous good under ADR, IMDG, and IATA.

Customs Classification: International HTS# 2916.31.1105

SECTION 15: Regulatory information

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

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
No chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
Benzoic acid, CAS-No.:65-85-0, Revision Date: 2007-03-01

Pennsylvania Right To Know Components
Benzoic acid, CAS-No.: 65-85-0, Revision Date: 2007-03-01

New Jersey Right To Know Components
Benzoic acid, CAS-No.: 65-85-0, Revision Date: 2007-03-01

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Workplace Hazardous Material Information System (WHMIS) classification: D2B

Chemical Inventories: Canada (DSL), China (IECSC), Europe (EINECS), & United States (TSCA)

EU REACH registration No.: **01-2119455536-33-0004**

15.2 Chemical Safety Assessment

HMIS Rating
Health: 2 Flammability: 1 Reactivity (Stability): 0 Personal Protection: X

NFPA Rating
Health: 2 Flammability: 1 Reactivity (Stability): 0 Specific Hazard: X

SECTION 16: Other information

16.1 Indication of changes
25 February 2015: This is the first SDS under OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))
24 May 2017: Add REACH pre-registration number in Section 15.
17 May, 2022: review and minor format changes.
13 November, 2024: Update in in Section 1: change phone number and delete fax number

16.2 Key literature references and sources for data
Hazard Communication Standard (HCS)(29 CFR 1910.1200(g)) and Appendix B, C, D
Information on Chemicals, ECHA website: http://echa.europa.eu/web/guest/home
Product Data Sheet and SDS information from manufacturer.

16.3 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS)(29 CFR 1910.1200(g)),

16.4 Training advice: accordance with Hazard Communication Standard (HCS)(29 CFR 1910.1200(g))

16.5 Further information
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.