



## Material Safety Data Sheet

### Benzoic acid

MSDS# 02720

#### Section 1 - Chemical Product and Company Identification

MSDS Name: Benzoic acid

Catalog Numbers: AC149130000, AC149130010, AC149130025, AC221800000, AC221800010, AC221802500, AC221802500, AC423470000, AC423470020, AC423470250, AC423475000, A63-500, A65-500, A68-30

Synonyms: Benzenemethanoic acid; Benzenecarboxylic acid; Phenylcarboxylic acid; Phenylformic acid; Carboxybenzene; Benzeneformic acid; Dracrylic acid.

Company Identification: Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

#### Section 2 - Composition, Information on Ingredients

CAS#: 65-85-0

Chemical Name: Benzoic acid

%: >99

EINECS#: 200-618-2

Hazard Symbols: XN



Risk Phrases: 22 36/37/38 42/43

#### Section 3 - Hazards Identification

##### EMERGENCY OVERVIEW

Warning! Harmful if swallowed. May cause sensitization by inhalation and by skin contact. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

##### Potential Health Effects

Eye: Causes severe eye irritation. Causes redness and pain.

Skin: Causes skin irritation. May be harmful if absorbed through the skin. May cause sensitization by skin contact.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.

Inhalation: Causes respiratory tract irritation. May be harmful if inhaled. May cause respiratory sensitization.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

#### Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician: Treat symptomatically and supportively.

#### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Autoignition Temperature: 570 deg C ( 1,058.00 deg F)

Flash Point: 121 deg C ( 249.80 deg F)

Explosion Limits: Not available  
Lower:

Explosion Limits: Not available  
Upper:

NFPA Rating: health: 2; flammability: 1; instability: 0;

#### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

#### Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use only in a chemical fume hood.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container.

#### Section 8 - Exposure Controls, Personal Protection

-----+-----+-----+-----+				
Chemical Name	ACGIH	NIOSH	OSHA - Final PELs	
-----+-----+-----+-----+				
Benzoic acid	none listed	none listed	none listed	
-----+-----+-----+-----+				

OSHA Vacated PELs: Benzoic acid: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

#### Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder

Color: white

Odor: pleasant odor

pH: 2.8 (satd soln)

Vapor Pressure: 0.0012 mm Hg @ 25 deg C

Vapor Density: 4.21 (air=1)

Evaporation Rate: Negligible.

Viscosity: Not available

Boiling Point: 249.2 deg C @ 760 mmHg ( 480.56°F)

Freezing/Melting Point: 122.4 deg C ( 252.32°F)

Decomposition Temperature: Not available

Solubility in water: 3.4 g/l @ 25°C

Specific Gravity/Density: Not available.

Molecular Formula: C7H6O2

Molecular Weight: 122.12

#### Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Incompatible materials, dust generation, excess heat.
Incompatibilities with Other Materials	Strong oxidizing agents, strong reducing agents, strong bases.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide.
Hazardous Polymerization	Will not occur.

#### Section 11 - Toxicological Information

RTECS#: CAS# 65-85-0: DG0875000

RTECS:

**CAS# 65-85-0:** Draize test, rabbit, eye: 100 mg Severe;

Draize test, rabbit, skin: 500 mg/24H Mild;

Inhalation, rat: LC50 = >26 mg/m3/1H;

LD50/LC50: Oral, mouse: LD50 = 1940 mg/kg;

Oral, rat: LD50 = 1700 mg/kg;

Skin, rabbit: LD50 = >10 gm/kg;

Other: Human TDLo skin of 6 mg/kg produced dyspnea (difficult or labored breathing) and allergic dermatitis.

Carcinogenicity: Benzoic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

#### Section 12 - Ecological Information

Ecotoxicity: Fish: Mosquito Fish: LC50 = 180 mg/L; 96 Hr; Unspecified

Bacteria: Phytobacterium phosphoreum: EC50 = 16.9 mg/L; 96 Hr; Microtox test @ 15°C

Other: Do not empty into drains.

#### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

#### Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

USA RQ: CAS# 65-85-0: 5000 lb final RQ; 2270 kg final RQ

#### Section 15 - Regulatory Information

## European/International Regulations

### European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 42/43 May cause sensitization by inhalation and skin contact.

Safety Phrases:

S 22 Do not breathe dust.

S 24 Avoid contact with skin.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### WGK (Water Danger/Protection)

CAS# 65-85-0: 1

### Canada

CAS# 65-85-0 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2A, D2B, D1B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 65-85-0 is listed on Canada's Ingredient Disclosure List

## US Federal

### TSCA

CAS# 65-85-0 is listed on the TSCA Inventory.

### Section 16 - Other Information

MSDS Creation Date: 2/15/1999

Revision #13 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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