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; Dracylic acid.

Fisher Scientific
Company Identification:
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


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.
Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while
Skin: $\quad \begin{aligned} & \text { Get medical aid immediately. Immediately flat } \\ & \text { removing contaminated clothing and shoes. }\end{aligned}$
Ingestion: Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical

Inhalation:
ors
Physician:
Notes to 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. Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

General
Information:
Extinguishing
Media:
Autoignition $570 \mathrm{deg} \mathrm{C}(1,058.00 \mathrm{deg} \mathrm{F})$
Temperature:
Flash Point: $121 \mathrm{deg} \mathrm{C}(249.80 \mathrm{deg} \mathrm{F})$
Explosion Limits:
Lower: ${ }^{\text {Not available }}$
Explosion Limits:
Upper: ${ }^{\text {Not available }}$

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

## Section 6 - Accidental Release Measures

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

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


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
$\mathrm{pH}: 2.8$ (satd soln)

Vapor Pressure: $0.0012 \mathrm{~mm} \mathrm{Hg} @ 25$ deg C
Vapor Density: 4.21 (air=1)
Evaporation Rate: Negligible.
Viscosity: Not available
Boiling Point: 249.2 deg C @ 760 mmHg ( $480.56^{\circ} \mathrm{F}$ )
Freezing/Melting Point: $122.4 \operatorname{deg} \mathrm{C}\left(252.32^{\circ} \mathrm{F}\right)$
Decomposition Temperature: Not available
Solubility in water: $3.4 \mathrm{~g} / 1$ @ $25^{\circ} \mathrm{C}$
Specific Gravity/Density: Not available.
Molecular Formula: C7H6O2
Molecular Weight: 122.12
Section 10 - Stability and Reactivity
Stable under normal temperatures and pressures.
Incompatible materials, dust generation, excess heat.
Strong oxidizing agents, strong reducing agents, strong bases.
Carbon monoxide, carbon dioxide.
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: $500 \mathrm{mg} / 24 \mathrm{H}$ Mild;
Inhalation, rat: LC50 $=>26 \mathrm{mg} / \mathrm{m} 3 / 1 \mathrm{H}$;
Oral, mouse: LD50 $=1940 \mathrm{mg} / \mathrm{kg}$;
Oral, rat: LD50 $=1700 \mathrm{mg} / \mathrm{kg}$;
Skin, rabbit: LD50 = >10 gm/kg;
Other: Human TDLo skin of $6 \mathrm{mg} / \mathrm{kg}$ 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: $\quad$ See actual entry in RTECS for complete information.
Section 12 - Ecological Information
Ecotoxicity:
Fish: Mosquito Fish: LC50 $=180 \mathrm{mg} / \mathrm{L}$; 96 Hr ; Unspecified
Bacteria: Phytobacterium phosphoreum: EC50 $=16.9 \mathrm{mg} / \mathrm{L} ; 96 \mathrm{Hr}$; Microtox test $@ 15^{\circ} \mathrm{C}$
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:

## 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 merchantibility 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.

