

MATERIAL SAFETY DATA SHEET

Benzoic Acid

SECTION 1 . Product and Company Identification

Product Name and Synonym: Benzoic Acid
Product Code: B1700
Material Uses:
Manufacturer: Science Stuff
1104 Newport Ave
Austin, TX 78753
(512) 837-6020
Entry Date : 5/28/2013
Print Date: 5/28/2013
24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	2
Flammability:	1
Reactivity:	0
Hazard Rating: Least Slight Moderate High Extreme 0 1 2 3 4 NA=Not Applicable NE=Not Established	

SECTION 2 HAZARD IDENTIFICATION

May be fatal if inhaled, swallowed or absorbed thru the skin Avoid all contact. Use with adequate ventilation. Wash thoroughly after use. Keep container closed.

Physical state: Solid. [Crystal.]
OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview:

WARNING!
CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
MAY BE HARMFUL IF SWALLOWED.
MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: MUCCOUS MEMBRANES,
RESPIRATORY TRACT, SKIN, EYES.
MAY BE HARMFUL IF INHALED

Do not ingest. Avoid contact with eyes, skin and clothing. Use only adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thorough after handling.

Routes of entry:
Inhalation. Ingestion.

Potential acute health effects:

Eyes: Irritating to eyes
Skin: Irritating to skin
Inhalation: Irritating to respiratory system. May be harmful in inhaled.
Ingestion: May harmful if swallowed.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity/ Reproductive toxicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.
Target organs: May cause damage to the following organs:
mucous membranes, upper respiratory tract, skin, eyes,
Medical conditions aggravated by over-exposure:
Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product

SECTION 3 MIXTURE COMPONENTS

Benzoic Acid

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Benzoic Acid	CAS# 65-85-0	100%	W/W	skin-human 6mg/Kg LDLO

SECTION 4 FIRST AID MEASURES

May be fatal if inhaled, swallowed or absorbed thru the skin. Avoid all contact. Use with adequate ventilation. Wash thoroughly after use. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

INGESTION: If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type:	Water spray, Carbon dioxide, dry chemical, powder, foam.
Fire / Explosion Hazards:	Slight fire hazard when exposed to heat or flame. Dust and air mixtures may be explosive above flash point. Vapor from molten benzoic acid may form explosive mixture with air.
Fire Fighting Procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Sweep up and place in suitable (fiberboard) containers for reclamation or later disposal.

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7 HANDLING AND STORAGE

Store in a cool dry place away from incompatible substances.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Dust mask

Benzoic Acid

Ventilation

- Local Exhaust
Mechanical

Protective Gloves: Wear appropriate gloves to prevent skin exposure

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

Consult local authorities for acceptable exposure limits.

Engineering measures: Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal Protection

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Recommended:

safety glasses with side-shields,

Skin: Personal protective equipment for the body should be selected based on the task being performed and risks involved and should be approved by a specialist before handling this product.

Body recommended:

lab coat and gloves

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	252 Deg f	Percent Volatile by Volume:	2.9 @ 20 Deg C
Boiling Point:	480 Deg f	Evaporation Rate	Information not available
Vapor Pressure:	1 mmhg @ 205 Deg F	Evaporation Standard	

Benzoic Acid

Vapor Density:	4.2	Auto Ignition Temp	Not applicable
Solubility in Water:	soluble	Lower Flamm. Limit in Air	3 G/ft3
Appearance /Odors:	White powder or crystals with benzoin odor	Upper Flamm. Limit in Air	35 G/ft3
Flash Point:	250 Deg F		
Specific Gravity:	1.2659 @ 15 Deg C		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	Avoid contact with heat, sparks, flames, or other sources of ignition.
Materials to Avoid:	Avoid contact with strong oxidizers, excessive heat, spark, or open flames.
Hazardous Decomposition Products:	Toxic oxides of carbon.
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

SECTION 11 Toxicological Information

Toxicity data- United States- Product/ ingredient name:

Benzoic Acid			
LD50	1600 g/kg	Intraperitoneal	Rat
LD50	1700 mg/kg	Intravenous	Rat
LD50	1700 mg/kg	Oral	Rat
LD50	1940 mg/kg	Oral	Mouse
LDLo	500 mg/kg	Oral	Man

Carcinogenic effects: No known significant effects or critical hazards.
Mutagenic effects: No known significant effects or critical hazards.
Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards.

SECTION 12 Ecological Information

Aquatic ecotoxicity

Product/ ingredient name
Benzoic Acid

Acute EC50 860 mg/L Fresh water Daphnia - water flea - Daphnia magna - Nephete - <24 hours 48 hours
Acute LC50 180000 ug/L Fresh water Fish - Western mosquitofish - Gambusia affinis - Adult 96 hours

Environmental effects : No known significant effects or critical hazards.
Other adverse effects : No known significant effects or critical hazards.

SECTION 13 Disposal Considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14 Transport Information

Benzoic Acid

DOT Classification: Not Regulated

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

United States

HCS Classification:
Target organ effects
Irritating material

U.S. Federal regulations:

United States inventory (TSCA 8b): listed

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notifications: No products were found.

SARA 302/304/311/312 hazardous chemicals: Benzoic Acid

SARA 311/312 MSDS distribution- Chemical inventory- hazard identification: Benzoic Acid

Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substance: No products were found.

Clean Air Act (CAA) 112 regulated toxic substance: No products were found.

DEA List I Chemicals : not listed

(Precursor Chemicals)

DEA List II Chemicals : not listed

(essential Chemicals)

Massachusetts Substance : This material is listed.

New Jersey Hazardous Substances : This material is listed.

New York Acutely Hazardous Substances : This material is listed.

Pennsylvania RTK Hazardous Substances : This material is listed.

Canada

WHMIS (Canada) :

Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists : CEPA Toxic Substance: This material is not listed.

Canadian ARET: This material is not listed.

Canadian NPRI: This material is not listed.

Alberta Designated Substances: This material is not listed.

Ontario Designated Substances: This material is not listed.

Quebec Designated Substances: This material is not listed.

CEPA DSL/ CEPA NDSL : CEPA DSL:

This material is listed or exempted.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

SECTION 16 Additional Information

Benzoic Acid

Flammability

Health

Reactivity

Revisions

NFPA

0.1

The information herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of the information whether originating from the above mentioned company or not. Users of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely.