

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: Eastman(TM) Benzoic Acid Technical Grade, Flake

Product No.: EAN 900037. 32645-0F, P32645F5, P32645F8, P32645F6, P32645F1, P32645FA, P32645FB, P32645F4, P32645F3, P32645F9, P32645F7

Additional identification

Chemical name: benzoic acid
CAS-No.: 65-85-0

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

Identified uses: Additive.

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier

Eastman Chemical Company
200 South Wilcox Drive
Kingsport, TN 37660-5280 US
+14232292000

Visit our website at www.EASTMAN.com or email emnmsds@eastman.com

1.4 Emergency telephone number:

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

SECTION 2: Hazards identification

WARNING!
CAUSES EYE IRRITATION

SECTION 3: Composition/information on ingredients

3.1 / 3.2 Substances / Mixtures

General information:

Chemical name	Concentration	Additional identification	Notes
Benzoic acid	100%	CAS-No.: 65-85-0 EC No.: 200-618-2	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Skin contact:	Wash with soap and water. Get medical attention if symptoms occur.
Ingestion:	Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed: May irritate and cause redness and pain.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards:	None known.
Treatment:	Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards: None known.

5.1 Extinguishing media

Suitable extinguishing media: Water spray. Dry chemical. Carbon Dioxide.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture: Powdered material may form explosive dust-air mixtures.

5.3 Advice for firefighters

Special Fire Fighting Procedures: Fight fire from a protected location. Minimize dust generation and accumulation.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment.

6.2 Environmental precautions: Avoid release to the environment.

6.3 Methods and material for containment and cleaning up: Sweep up and place in a clearly labeled container for chemical waste.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Avoid breathing dust. Avoid contact with eyes. Use only with adequate ventilation. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities: Keep container closed.

7.3 Specific end use(s): Additive.

SECTION 8: Exposure controls/personal protection

**8.1 Control parameters
Occupational exposure limits**

If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.2 Exposure controls

Appropriate engineering controls: Good general ventilation (typically 10 air changer per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment

General information: Eye bath. Washing facilities.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection: It is a good industrial hygiene practice to minimize skin contact.

Other: No data available.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene measures: Observe good industrial hygiene practices.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical State:	Solid
Form:	Solid
Color:	White
Odor:	slight, Odorless
Odor Threshold:	No data available.
pH:	2.8 (25 °C)
Melting Point:	122.4 °C
Boiling Point:	249.2 °C
Flash Point:	Not applicable
Evaporation Rate:	No data available.
Flammability (solid, gas):	Not applicable
Flammability Limit - Upper (%)-:	No data available.
Flammability Limit - Lower (%)-:	No data available.
Vapor pressure:	0.11 Pa (20 °C)
Vapor density (air=1):	No data available.
Relative density:	1.321 (20 °C)
Solubility(ies)	
Solubility in Water:	2.93 g/l (20 °C)
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	log Pow: 1.88
Autoignition Temperature:	Not applicable
Decomposition Temperature:	No data available.
Viscosity:	Not applicable
Explosive properties:	Not classified
Oxidizing properties:	Not classified

SECTION 10: Stability and reactivity

10.1 Reactivity:	None known. Materials containing similar structural groups are normally stable.
10.2 Chemical stability:	Stable
10.3 Possibility of hazardous reactions:	None known.
10.4 Conditions to avoid:	Excessive heat.
10.5 Incompatible materials:	Strong oxidizing agents.

10.6 Hazardous decomposition products: Carbon Dioxide. Carbon Monoxide.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	None known.
Ingestion:	None known.
Skin contact:	None known.
Eye contact:	Causes serious eye damage.

11.1 Information on toxicological effects

Acute Toxicity

Oral

Product: No data available.

Specified substance(s)

Benzoic acid Oral LD-50: (Mouse): 2,250 mg/kg

Dermal

Product: No data available.

Specified substance(s)

Benzoic acid Dermal LD-50: (Rabbit): > 2,000 mg/kg (highest dose tested)

Inhalation

Product: No data available.

Specified substance(s)

Benzoic acid LC50 (Rat, 4 h): > 12.2 mg/l (highest concentration tested)

Repeated dose toxicity

Product: No data available.

Specified substance(s)

Benzoic acid NOAEL (Rat, in feed, > 90 d): 500 mg/kg

Skin corrosion/irritation:

Product: No data available.

Specified substance(s)

Benzoic acid (Rabbit, 4 h): none

Serious eye damage/eye irritation:

Product: No data available.

Specified substance(s)

Benzoic acid (Rabbit): Severe

Respiratory or skin sensitization:

Product: No data available.

Specified substance(s) Benzoic acid	Skin Sensitization:, (Guinea Pig) - non-sensitizing
Germ cell mutagenicity	
In vitro	
Product:	No data available.
Specified substance(s) Benzoic acid	Mutagenicity - Mammalian, : negative +/- activation Chromosomal abberation, : equivocal - activation Chromosomal abberation, : positive - activation Chromosomal abberation, : negative - activation
In vivo	
Product:	No data available.
Specified substance(s) Benzoic acid	No data available.
Carcinogenicity	
Product:	No data available.
Specified substance(s) Benzoic acid	No data available.
Reproductive toxicity	
Product:	No data available.
Specified substance(s) Benzoic acid	No data available.
Specific target organ toxicity - single exposure	
Product:	No data available.
Specified substance(s) Benzoic acid	No data available.
Specific target organ toxicity - repeated exposure	
Product:	No data available.
Specified substance(s) Benzoic acid	No data available.
Aspiration hazard	
Product:	No data available.
Specified substance(s) Benzoic acid	No data available.
Other adverse effects:	No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)
 Benzoic acid No data available.

Aquatic invertebrates
Product: No data available.

Specified substance(s)
 Benzoic acid No data available.

Chronic Toxicity

Fish
Product: No data available.

Specified substance(s)
 Benzoic acid No data available.

Aquatic invertebrates
Product: No data available.

Specified substance(s)
 Benzoic acid No data available.

Toxicity to Aquatic Plants
Product: No data available.

Specified substance(s)
 Benzoic acid No data available.

12.2 Persistence and degradability

Biodegradation
Product: No data available.

Specified substance(s)
 Benzoic acid No data available.

BOD/COD ratio
Product No data available.

Specified substance(s)
 Benzoic acid No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)
 Benzoic acid No data available.

12.4 Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Benzoic acid No data available.

12.5 Results of PBT and vPvB assessment: No data available.

Benzoic acid No data available.

12.6 Other adverse effects: No data available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

General information: No data available.

Disposal Methods: Dispose of waste and residues in accordance with local authority requirements. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

SECTION 14: Transport information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT

Class 9, Packing Group III when material is shipped in quantities in one package at or above the Reportable Quantity and when no other hazard class applies; otherwise, not regulated.

Reportable Quantity: 2,270 kg

IMDG - International Maritime Dangerous Goods Code

Class not regulated

IATA

Class not regulated

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

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

WHMIS (Canada) Status: controlled

WHMIS (Canada) Hazard Classification: D/2/B

SARA 311-312 Hazard Classification(s):
immediate (acute) health hazard

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List
NONE

OSHA: hazardous

TSCA (US Toxic Substances Control Act): All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): All components of this product are listed on AICS or otherwise comply with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): All components of this product are listed in the Handbook or have been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): All components of this product are listed on the Korean inventory or otherwise comply with the Korean Toxic Substances Control Act.

Philippines Inventory (PICCS): All components of this product are listed on the Philippine inventory or otherwise comply with PICCS.

Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 2, Flammability - 1, Chemical Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Training information: No data available.

Issue Date: 06/28/2011

SDS No:

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.