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SAFETY DATA SHEET

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

Product identifier

Product name: Probenz(TM) SP Powder Sodium Benzoate, Food Grade, Kosher

Product No.: EAN 985138. 32877-00, P328770G, P3287701, P3287703, P3287702, P3287704

Additional identification

Chemical name: sodium benzoate

CAS-No.: 532-32-1

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

Identified uses: Preservative, antioxidant (food grade), cosmetic component

Uses advised against: None known.

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

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

Hazard Classification:

Health Hazards

Serious Eye Damage/Eye Irritation Category 2A

OSHA Specified Hazards:

Combustible dust May form combustible dust concentrations in air.

Warning label items including precautionary statement:

Pictogram:



Signal Words: WARNING!



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Hazard Statement(s): H319: Causes serious eye irritation.

May form combustible dust concentrations in air.

Precautionary Statement:

Prevention: P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P243: Take precautionary measures against static discharge.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

Response: P305+P351+P338: IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

Disposal: P501: Dispose of contents/container to an appropriate treatment and

disposal facility in accordance with applicable laws and regulations, and

product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None known.

SECTION 3: Composition/information on ingredients

Substances / Mixtures

General information:

Chemical name	Concentration	Additional identification	Notes
sodium benzoate	>99%	CAS-No.: 532-32-1	#
water	<1%	CAS-No.: 7732-18-5	

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

SECTION 4: First aid measures

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.

Most important symptoms and

effects, both acute and

delayed:

May irritate and cause redness and pain.

Indication of any immediate medical attention and special treatment needed

Hazards: None known.

[#] This substance has workplace exposure limit(s).



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Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: Material can accumulate static charges which may cause an electrical

spark (ignition source). Use proper bonding and/or grounding procedures.

Extinguishing media

Suitable extinguishing

media:

Water spray. Dry chemical. Carbon Dioxide.

Unsuitable extinguishing

media:

None known.

Special hazards arising from

the substance or mixture:

Powdered material may form explosive dust-air mixtures.

Advice for firefighters

Special fire fighting

procedures:

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

Personal precautions,

protective equipment and emergency procedures:

Wear appropriate personal protective equipment.

Environmental Precautions: Avoid release to the environment.

Methods and material for

containment and cleaning

up:

Sweep up and place in a clearly labeled container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from

entering drains, sewers, or streams. Dike for later disposal.

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:

Precautions for safe handling: Avoid contact with eyes. Wash thoroughly after handling.

Conditions for safe storage,

including any incompatibilities:

Keep container closed. This material may be used in food. Store separated

from: Odorous substances. Toxic substances.

Specific end use(s): Antioxidant



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SECTION 8: Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Country specific exposure limits have not been established or are not applicable unless listed below.

Chemical name	type	Exposure Limit Values	Source
sodium benzoate	ST ESL	50 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (03 2014)
	AN ESL	5 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (03 2014)

Exposure controls

Appropriate engineering controls:

Good general ventilation (typically 10 air changes 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. If exposure limits have not been established, maintain airborne levels to an acceptable level.

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: Airpurifying 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. Observe good industrial hygiene

practices.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties Appearance



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Physical state: solid

Form: Crystalline Powder.

Color: White Odor: Odorless

Odor Threshold:

pH:

Not determined.

calculated 8

Melting Point 300 °C

Boiling Point: decomposes Flash Point: not applicable **Evaporation Rate:** Not determined. Flammability (solid, gas): not applicable Flammability Limit - Upper (%)-: No data available. Flammability Limit - Lower (%)-: No data available. Vapor pressure: not applicable Vapor density (air=1): No data available. **Specific Gravity:** 1.44 (25 °C)

Solubility(ies)

Solubility in Water:556 g/lSolubility (other):Complete.Partition coefficient (n-octanol/water):log Pow: -2.27Autoignition Temperature:not applicable

Decomposition Temperature: Thermal stability not tested. Low stability hazard

expected at normal operating temperatures.

Dynamic viscosity:not applicableKinematic viscosity:not applicableExplosive properties:Not classified.Oxidizing properties:Not classified.

SECTION 10: Stability and reactivity

Reactivity: None known.

Chemical Stability: Stable

Possibility of Hazardous

Reactions:

None known.

Conditions to Avoid:None at ambient temperatures.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition

Products:

Carbon Dioxide. Carbon Monoxide.

SECTION 11: Toxicological information

Information on likely routes of exposure Inhalation: None known.



Ingestion:

SDSUS / EN / TSDSUS04

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Skin contact: None known.

Eye contact: Causes eye irritation.

Information on toxicological effects

Oral

Product: No data available.

Specified substance(s):

sodium benzoate Oral LD-50: (Rat): > 2,000 mg/kg

Dermal

Product: No data available.

Specified substance(s):

sodium benzoate Dermal LD-50: (Rabbit): > 2,000 mg/kg

None known.

Inhalation

Product: No data available.

Specified substance(s):

sodium benzoate LC50 (Rat,): > 2069 ppm

Repeated dose toxicity

Product: No data available.

Specified substance(s):

sodium benzoate NOAEL (Rat, Oral Study): 1,000 mg/kg

NOAEC (Rat, Inhalation study:): 250 mg/l Read-across from a similar material

NOAEL (Rat, Dermal Study): 2,500 mg/kg

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

sodium benzoate (Rabbit, 24 h): Slight

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

sodium benzoate (Rabbit, 24 h): moderate

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

sodium benzoate OECD 429: LLNA (Mouse): non-sensitizing

Carcinogenicity

Product: No data available.



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Specified substance(s):

sodium benzoate Rat: Ingestion Not suspected as a human carcinogen.

Toxicity to reproduction

Product: No data available.

Specified substance(s):

sodium benzoate (Rat); NOAEL: 500 mg/kg; Ingestion; Remarks: Read-across from a similar

material

Developmental toxicity

Product: No data available.

Specified substance(s):

sodium benzoate Rat; NOAEL: 175 mg/kg; Ingestion

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

sodium benzoate Salmonella typhimurium assay (Ames test) (Bacterial Reverse Mutation Assay):

negative

In vivo

Product: No data available.

Specified substance(s):

sodium benzoate Chromosomal aberration (Mammalian Bone Marrow Chromosome Aberration Test)

oral: gavage (Rat): negative

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s):

sodium benzoate Not classified.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s):

sodium benzoate Not classified.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

SECTION 12: Ecological information



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Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

sodium benzoate LC-50 (Fathead Minnow, 96 h): 484 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

sodium benzoate LC-50 (Water Flea, 96 h): > 100 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

sodium benzoate NOEC: (Zebra Fish, 6 d): 10 mg/l

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

sodium benzoate EC-50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 30.5 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

sodium benzoate 75 % (30 d) Readily biodegradable

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: -2.27

Mobility in Soil: No data available.

Other Adverse Effects: No data available.



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SECTION 13: Disposal considerations

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 not regulated

IMDG - International Maritime Dangerous Goods Code

Class not regulated

IATA

Class not regulated

SECTION 15: Regulatory information

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 SDS 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



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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): All components of this product are 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

No data available.

sources for data:

Training information: No data available.

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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.