Benzocaine, USP

SDS Preparation Date (11/17/2016):

SAFETY DATA SHEET

Section 1 Identification of the substance/mixture and of the company/undertaking

Product Identifier:
Identification on the label/ Tradename: Benzocaine, USP
Identification of the Product: CAS# 94-09-7
RTECS No.: DG2450000
CI No.: Not Available
Synonyms: p-Aminobenzoic acid ethyl ester; 4-Aminobenzoic acid, ethyl esterAmericaine; Anaesthesin; Anesthesein Anesthone; Keloform; Topcaine; Ethyl aminobenzoate; Ethyl p-aminobenzoate; Ethyl 4-aminobenzoateNorcain; Orthesin; Parathesin

Relevant identified uses of the substance and uses advised against:
Identified Uses: Topical anesthetic
Uses Advised Against: No information available

Name, address, and telephone number of the manufacturer:
Refer to Supplier
Name, address, and telephone number of the supplier:
Encore Scientific 801 W. New Orleans St., Broken Arrow, Ok 74011
Supplier’s Telephone #
800-454-2304 Monday to Friday 8:00 am to 6:00 pm (Central time)
24 Hr. Emergency Tel #
INFOTRAC: (800) 535-5053 (Within Continental US and Canada); (352)323-3500 (International)

Section 2 Hazards Identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Serious eye damage/eye irritation Category 2B
Skin sensitization Category 1

Label Elements
WARNING
Hazard statements
Causes eye irritation
May cause an allergic skin reaction
Section 2 Hazards Identification (continued)

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
May be harmful if swallowed
Causes mild skin irritation

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response
Specific treatment
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Section 3 Composition/information on ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzocaine</td>
<td>94-09-7</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 4 First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222
Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician.
Eye Contact: Flush eye with water for 15 minutes. Get medical attention.
Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.
Section 4 First aid measures (continued)

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed
Notes to Physician: Treat symptomatically

Protection of first-aiders
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

Section 5 Fire-Fighting measures

Extinguishing Media
Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO2). Water spray mist or foam.
Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical
Hazardous Combustion Products: Carbon monoxide; Carbon dioxide; Nitrogen oxides
Specific hazards: May be combustible at high temperatures

Special Protective Actions for Firefighters
Specific Methods: No information available.
Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Section 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Personal Precautions: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Avoid dust formation. Remove all sources of ignition.
Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up
Methods for containment: Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.
Methods for cleaning up: Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.
Section 7 Handling and storage

Precautions for safe handling
Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice:
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapors/dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities
Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Protect from light. Sensitive to light. Store in light-resistant containers. Store away from incompatible materials.


Section 8 Exposure Controls/Personal Protection

Control Parameters
National occupational exposure limits:

United States

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA Wheel</th>
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<td>None</td>
<td>None</td>
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</table>

Canada

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<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
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<tbody>
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Australia and Mexico

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<th>Mexico</th>
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</thead>
<tbody>
<tr>
<td>Benzocaine - 94-09-7</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Benzocaine, USP

Section 8 Exposure Controls/Personal Protection (continued)

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Wear respirator with dust filter.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

Section 9 Physical and chemical properties

Information on basic physical and chemical properties:

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Autoignition Temperature: No information available</td>
<td>Flash Point Tested according to: Not applicable</td>
<td>Lower Explosion Limit (%): No information available</td>
<td>Upper Explosion Limit (%): No information available</td>
</tr>
<tr>
<td>pH: No information available</td>
<td>Decomposition temperature(°C/°F): No information available</td>
<td>Melting point/range(°C/°F): 89-92 °C/192.2-197.6 °F</td>
<td>Boiling point/range(°C/°F): 310 °C/590 °F</td>
</tr>
<tr>
<td>Specific gravity: No information available</td>
<td>Density (g/cm3): No information available</td>
<td>Bulk density: No information available</td>
<td>Evaporation rate: No information available</td>
</tr>
<tr>
<td>Vapor density: No information available</td>
<td>Vapor pressure @ 20°C (kPa): No information available</td>
<td>VOC content (g/L): No information available</td>
<td>Odor threshold (ppm): No information available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water): 1.86</td>
<td>Solubility: Practically insoluble in water Solubility in Water: 1,310 mg/l (0.1 g/100 ml) of water at 25 deg. C Soluble in dilute acids Solubility in Chloroform: 1 gram dissolves in 2 ml of chloroform Solubility in Ether: 1 gram dissolves in about 4 ml of Ether Solubility in alcohol: 1 gram dissolves in about 5 ml of alcohol</td>
<td>Viscosity: No information available</td>
<td>Miscibility: No information available</td>
</tr>
</tbody>
</table>
Benzocaine, USP

Section 10 Stability and reactivity

Reactivity
Reactive with oxidizing agents
Reacts with bases
Reactive with acids
Reacts with reducing agents

Chemical stability
Stability: Stable at normal conditions

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Exposure to light. Avoid dust formation. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Incompatible materials.


Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

Section 11 Toxicological information

Information on likely routes of exposure
Principal Routes of Exposure: Ingestion. Inhalation. Skin.
Acute Toxicity

Component Information
Benzocaine – 94-09-7
LD50/oral/rat = 3042 mg/kg
LD50/oral/mouse = 2500 mg/kg
LD50/dermal/rat = No information available
LD50/dermal/rabbit = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information
LC50/inhalation/rat No information available
LC50/Inhalation/mouse No information available
LD50/dermal/rabbit No information available
LD50/dermal/rat No information available
LD50/oral/mouse = 3042 mg/kg
LD50/oral/rat = 2500 mg/kg
Benzocaine, USP

Section 11 Toxicological information (continued)

Symptoms
Skin Contact: May cause skin irritation. Mild skin irritation. May cause allergic skin reaction.
Eye Contact: Causes eye irritation. Mild eye irritation.
Inhalation: May cause irritation of respiratory tract.
Ingestion: May cause digestive (gastrointestinal) tract irritation. May cause numbness of the mouth (lips and tongue). May cause methemoglobinemia, (the formation of methemoglobin in the blood which causes deficient oxygenation of the blood due to decreased available hemoglobin). Signs and symptoms of methemoglobinemia include shortness of breath, cyanosis (a bluish discoloration of the mucous membranes and unpigmented areas of the body), mental status changes such as headache, mental impairment, fatigue, muscular weakness, exercise intolerance, lightheadedness, dizziness, incoordination, seizures, and loss of consciousness. Arterial blood with elevated methemoglobin levels has a characteristic chocolate-brown color as compared to normal bright red oxygen containing arterial blood. Severe methemoglobinemia is characterized by bradycardia or tachydardia (slow or fast heart beat), dysrhythmias, seizures, coma and death. May affect respiration (respiratory depression).
Aspiration hazard: No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Chronic Toxicity: Prolonged or repeated skin contact may cause allergic reaction. Prolonged or repeated skin contact may cause allergic contact dermatitis. Prolonged or repeated ingestion may cause methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, shortness of breath, cyanosis (a bluish discoloration of the skin, lips, nails due to deficient oxygenation of the blood), rapid heart rate, unconsciousness.
Sensitization: May cause sensitization by skin contact
Mutagenic Effects: No information available
Carcinogenic effects: Not considered carcinogenic.

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH-Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS-Carcinogens</th>
<th>Australia-Prohibited Carcinogenic Substances</th>
<th>Australia-Notifiable Carcinogenic Substances</th>
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<td>Not listed</td>
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</table>

Reproductive toxicity No data is available
Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity
STOT - single exposure No information available
STOT - repeated exposure No information available
Target Organs: Blood. Methemoglobin formation.
Section 12 Ecological information

Ecotoxicity
Ecotoxicity effects: Aquatic environment.

*Benzocaine - 94-09-7*

Freshwater Fish Species Data:
- 17.9 - 20.1 mg/L LC50 Cyprinus carpio 96 h static 1
- 24.9 - 26.9 mg/L LC50 Pimephales promelas 96 h static 1
- 34.6 - 36.1 mg/L LC50 Pimephales promelas 96 h flow-through 1
- 5.92 - 9.76 mg/L LC50 Oncorhynchus mykiss 96 h static 1
- 7.48 - 11.3 mg/L LC50 Lepomis macrochirus 96 h static 1

Persistence and degradability: Inherently biodegradable
Bioaccumulative potential: Potential for bioconcentration in aquatic organisms is low.
Mobility: It is expected to have moderate mobility based upon estimated Koc.

Section 13 Disposal considerations

Disposal Methods
Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

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<tbody>
<tr>
<td>Benzocaine</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>
### Section 14 Transport information

**DOT**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** None
- **ERG No:** No information available
- **Marine Pollutant:** No data available
- **DOT RQ (lbs):** No information available

**TDG (Canada)**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available

**ADR**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Classification Code:** No information available
- **Description:** No information available
- **CEFIC Tremcard No:** No information available

**IMO / IMDG**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available

**Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available
- **IMDG Page:** No information available
- **Marine Pollutant:** No information available
- **MFAG:** No information available
- **Maximum Quantity:** No information available

**RID**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Classification Code:** No information available
- **Description:** No information available

**ICAO**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available

**IATA**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available
Benzocaine, USP

SAFETY DATA SHEET

Section 15 Regulation information

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>Korea KECL</th>
<th>Philippines PICCS</th>
<th>Japan ENCS</th>
<th>China</th>
<th>Australia AICS</th>
<th>EINECS – No.</th>
</tr>
</thead>
</table>

U.S. Regulations


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA – Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 – Chemical Category</th>
<th>Section 313 – Reporting de minimis</th>
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</thead>
<tbody>
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<td>Benzocaine</td>
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U.S. TSCA

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 – Chemicals with Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) – Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzocaine</td>
<td>Not applicable</td>
<td>Not applicable</td>
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</tbody>
</table>

Canada

WHMIS hazard class: D2B Toxic materials

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

<table>
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<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
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<tbody>
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Benzocaine, USP

SDS Preparation Date (11/17/2016):

SAFETY DATA SHEET

Section 15 Regulation information (continued)

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I – Toxic Substances</th>
<th>CEPA – 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
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<tbody>
<tr>
<td>Benzocaine</td>
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</table>

EU Classification

R-phrase(s):  R36 - Irritating to eyes.
R43 - May cause sensitization by skin contact.

S-phrase(s):  S24 - Avoid contact with skin.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 - Wear suitable gloves and eye/face protection.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits</th>
<th>Safety Phrases</th>
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<tbody>
<tr>
<td>Benzocaine</td>
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<td>No information</td>
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</tbody>
</table>

The Product is classified in accordance with Annex VI to Directive 67/548/EEC
Indication of Danger:  Xi - Irritant.

Xi

Section 16 Other information

Further information: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to reader:
Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.