SECTION 1: Identification

1.1 Product identifier
Sodium Benzoate, Granular

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

1.2.1 Relevant identified uses
Preservative, antioxidant (food grade), cosmetic component.

1.2.2 Uses advised against
No specific uses advised against have been identified.

1.3 Details of the supplier of the safety data sheet
Velsicol Chemical LLC
10400 W. Higgins Road, Suite 303
Rosemont, Illinois 60018 USA
Phone: (847) 813-7888
Fax: (847) 768-3227
Email: customerservice@velsicol.com

Velsicol Chemical Ireland
Harcourt Centre
Harcourt Road
Dublin 2
Republic of Ireland
Email: customerservice@velsicol.com

1.4 Emergency telephone number
Outside the continental U.S.A. call CHEMTREC 1-800-424-9300 (24 hours)
In the continental U.S.A. call CHEMTREC 1-800-424-9300 (24 hours)

SECTION 2: Hazard(s) identification

2.1 Hazard classification and Hazard statement(s)
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

<table>
<thead>
<tr>
<th>Hazard classification</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye</td>
<td>Cause serious eye irritation.</td>
</tr>
</tbody>
</table>

Appearance: white powder.
Cause serious eye irritation. May cause skin irritation. May cause respiratory and digestive tract irritation. Slightly hazardous in case of ingestion.
May form combustible dust concentrations in air.

2.2 Precautionary statements
Avoid contact with skin and eyes.
Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor/physician.

Store in a well-ventilated place. Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Take precautionary measures against static discharge.
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.

2.3 Signal Word
WARNING

2.4 Pictograms

2.5 Other hazards
None known

SECTION 3: Composition/information on ingredients:

3.1 Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Synonyms</th>
<th>CAS No.</th>
<th>EC NO.</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Benzoate</td>
<td>Benzoic acid sodium salt,</td>
<td>532-32-1</td>
<td>208-534-8</td>
<td>&gt;99.0</td>
</tr>
<tr>
<td></td>
<td>Sodium benzoic acid</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2 Mixtures
Not applicable

SECTION 4: First-aid measures

4.1 Description of first aid measures

4.1.1 General information:
Hazardous in case of eye contact (irritant), of skin contact (irritant), of ingestion, of inhalation. Move out of dangerous area if irritation or other symptoms occur from any route of exposure.

See Section 11 for toxicological information.

4.1.2 Following inhalation:
If inhaled, move to fresh air. Get medical attention if symptoms persist

4.1.3 Following skin contact:
Flush immediately the area with soap and plenty of water. Remove contaminated clothing and shoes. Seek medical attention if symptoms occur.

4.1.4 Following eye contact:
Check for and remove any contact lenses. Flush immediately with plenty of water for at least 15 minutes. Seek medical attention.

4.1.5 Following ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention.

4.1.6 Self-protection of the first aider:
Wear protective gloves/protective clothing/eye protection/face protection if possible. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Get medical attention immediately if exposure occurs from any route.

4.1.7 Notes for the doctor:
Not available.
4.2 Most important symptoms and effects, both acute and delayed
See section 2 and/or section 11

4.3 Indication of any immediate medical attention and special treatments needed
None known

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Flammability Properties: May form combustible dust.

Suitable extinguishing media: dry chemicals, water spray, and CO2 (may be ineffective on larger fires due to a lack of cooling capacity).

Unsuitable extinguishing media: Do not use water jet or any method that will create dust clouds.

5.2 Special hazards arising from the substance or mixture
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Products of combustion are carbon oxides (CO, CO2).

5.3 Advice for fire fighters
Firefighters and others who may be exposed to products of combustion should wear full firefighting turn out gear and self-contained breathing apparatus (SCBA). Firefighting equipment should be thoroughly decontaminated after use.

5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of eyes, skin and personal clothing. Wash thoroughly after handling.

Removal of ignition sources, provision of sufficient ventilation, avoid raising dust. Evacuate the danger area and consult an expert.

6.2 Environmental precautions
Do not allow to enter sewers / surface or ground water.
In case of spillage to water course or public sewers inform responsible authorities.

6.3 Methods and materials for containment and clearing up
Contain spill. Use spark-proof and explosion-proof tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spraying water on the contaminated surface. Prevent runoff from entering drains, sewers, or streams. Dispose in according to local and regional authority requirements.

6.4 References to other sections
See sections 8 and 13 for further advice.
SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures: Do not handle until all safety precautions have been read and understood; Wear suitable protective clothing, gloves and eye/face protection (see Section 8). Avoid contact with eyes.

Measures to prevent aerosol and dust generation: Provide ventilation to minimize exposure. Avoid raising dust. Do not breathe dust/fumes/gas/mist/vapours/spray.

Measures to protect the environment: Avoid release to the environment.

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding exposure through any route. Keep away from sources of ignition and avoid raising dust. Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, and well-ventilated area away from sources of ignition; Keep container tightly closed. This material may be used in food. Store separated from: Odorous substances. Toxic substances.

7.3 Specific end uses(s)

Antioxidant

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

No national limits have been set for Occupational Exposure Limit (OEL) values except the following:

ST ESL: 50 μg/m³; AN ESL: 5 μg/m³ (US. Texas).

ESL: Effects Screening Levels (Texas Commission on Environmental Quality, 03/2014)

8.2 Exposure controls

Ventilation must be adequate. Eliminate ignition sources (e.g., spark, static buildup, and heat, etc.).

8.2.1 Appropriate engineering controls:

Always provide effective general and, when necessary, local exhaust ventilation to draw dust and vapor away from workers to prevent routine inhalation. Ensure that eyewash stations and safety showers are close to the workstation location.

8.2.2 Personal protective equipment (PPE):

Do not eat, drink, or smoke whilst working. Remove all contaminated clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29 CFR). 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.

Eye and face protection

Safety glasses with side shields (or goggles) and a face shield should be worn when handling this substance. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Wear chemical resistant (impervious) gloves and a complete personal protective suit. Gloves and cloth must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

8.3 Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White granular</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>~ 8</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>&gt; 300 °C / 572 °F</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>May form combustible dust</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>4.97 (Air = 1)</td>
</tr>
<tr>
<td>Specific density</td>
<td>1.44 at 25°C</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Complete</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>log Pow: -2.27</td>
</tr>
<tr>
<td>Volatile by weight</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not considered to be explosive</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not considered to be oxidising</td>
</tr>
<tr>
<td>Dissociation Constant</td>
<td>Not available</td>
</tr>
<tr>
<td>Formula</td>
<td>C7H5NaO2</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>144.1</td>
</tr>
</tbody>
</table>

9.2 Other information
Some of the number specified are typical values and do not represent a specification.

SECTION 10: Stability and reactivity

10.1 Reactivity
Not a reactive substance and no reactive hazards are expected.

10.2 Chemical stability
The product is stable.

10.3 Possibility of hazardous reactions
No hazardous reactions expected under normal conditions of use.
10.4 **Conditions to avoid**
Excessive heat and ignition sources. Avoid static discharge. Avoid dust formation.

10.5 **Incompatible materials**
Strong oxidizing agents

10.6 **Hazardous decomposition products**
Carbon dioxide, carbon monoxide.

SECTION 11: Toxicological information

11.1 **Information on toxicological effects**

**Acute toxicity**
LD50 Oral (rat): > 2,000 mg/kg; LC50 Inhalation (rat): > 2069 mg/l; LD50 Dermal (rabbit): > 2,000 mg/kg

**Repeated dose toxicity**
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**
Slightly skin irritation – rabbit, 24 h

**Serious eye damage/irritation**
Risk of serious damage to eyes - rabbit.

**Respiratory/skin sensitisation**
No evidence of skin sensitization (Mouse).

**Germ cell mutagenicity**
Not classified

**Carcinogenicity**
Not classified. Not listed or regulated by IARC, NTP, OSHA, or ACGIH

**Reproductive toxicity**
Not classified.

**STOT-single exposure**
Not classified

**STOT-repeated exposure**
Not classified

**Aspiration hazard**
Not classified.

**Additional Information**
None available
SECTION 12: Ecological information

12.1. Toxicity
Fish: 96 hr LC50 (Fathead Minnow): 484mg/L; Chronic NOEC (Zebra Fish) >10mg/L (6days)
Invertebrates: 96 hr LC50 (Water Flea ): >100mg/L; Chronic NOEC: No data available.
Algae: 72 hr EC50: >30.5 mg/L; Chronic NOEC: No data available.

12.2 Persistence and degradability
Readily biodegradable and therefore is not Persistence.

12.3 Bioaccumulative potential
Log Kow = -2.27, Bio-concentration factor (BCF): No data available.

12.4 Mobility in soil
No specific information available

12.5 Results of PBT and vPvB assessment
Not PBT or vPvB

12.6 Other adverse effects
No information available.

SECTION 13: Disposal considerations

Incinerate in a properly permitted facility in accordance with federal, state and local regulation or regional authorities.

SECTION 14: Transport information

DOT (US): Not regulated
Marine pollutant: No
Poison Inhalation Hazard: No

This substance is not a dangerous good under ADR, IMDG, and IATA.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical Inventories: Australian (AICS / NICNAS), Canada (DSL), China (IECSC), Europe (EINECS), Japan (MITI), Korean (ECL), Philippine (PICCS), & United States (TSCA)
SARA 302 Components: None
SARA 313 Components: None
SARA 311/312 Hazardous Categorization
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No
Sodium Benzoate

Clean Water Act: Not applicable
Clean Air Act: Not applicable
OSHA: Hazardous
CERCLA: Not applicable
California Proposition 65: This product does not contain any Proposition 65 chemicals
State Right-to-Know: Not available

Canadian Workplace Hazardous Material Information System (WHMIS) classification: D2B

15.2 Chemical Safety Assessment

HMIS Rating
Health: 2 Flammability: 1 Reactivity (Stability): 0 Personal Protection: E

NFPA Rating
Health: 2 Flammability: 1 Reactivity (Stability): 0 Specific Hazard:

SECTION 16: Other information

16.1 Indication of changes
This is the first SDS under OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))
20 October 2015
16 June 2016, Change address to Suite 303 in Section 1.

16.2 Key literature references and sources for data
Information on Chemicals, ECHA website: http://echa.europa.eu/web/guest/home
Product Data Sheet and SDS information from manufacturer.

16.3 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS)(29 CFR 1910.1200(g)),


16.5 Further information
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.