



## SAFETY DATA SHEET

### SODIUM BENZOATE

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1. PRODUCT IDENTIFIER

Product name:	Sodium Benzoate
Product No.:	SOBEN
CAS-No.:	532-32-1
REACH:	01-2119460683-35
EC No.:	208-534-8
Synonym:	Benzoic acid, Sodium salt, Benzoate of soda
Chemical Formula:	$C_7H_5NaO_2$

##### 1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Recommended use: As a treatment for urea cycle disorders due to its ability to bind amino acids;  
In fireworks as a fuel in whistle mix, a powder which emits a whistling noise when compressed into a tube and ignited;  
As a preservative;  
It is bacteriostatic and fungistatic under acidic conditions;  
It is used most prevalently in acidic foods such as salad dressings (vinegar), carbonated drinks (carbonic acid), jams and fruit juices (citric acid), pickles, and condiments;  
It is also found in alcohol-based mouthwash and silver polish.

##### 1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

HD Chemicals LTD  
UNIT 9 Scott Business Park  
PL2 2PB Plymouth UK

Contact Person responsible for SDS: Mr Peter Konefal, e-mail: [contact@hdchemicals.co.uk](mailto:contact@hdchemicals.co.uk)

#### SECTION 2: HAZARDS IDENTIFICATION

##### 2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification 67/548/EEC: Xi; R36



**Classification – EC 1272/2008:** Serious Eye Damage/Irritation; Category 2A (H319)

## 2.2. LABEL ELEMENTS



### SIGNAL WORDS

Warning

### RISK PHRASES

R36 Irritating to eyes

### HAZARD PHRASES

H319 Causes serious eye irritation

### PROTECTION PHRASES

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

### SAFETY PHRASES

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

67/548/EEC/1999/45/EC

### Composition information – main constituents

Substance name	Mol. Formula	REACH	Typical conc. (%w/w)	EINECS No.	CAS-No.	Classification
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	01-2119460683-35	N/A	208-534-8	532-32-1	Xi; R36



EC 1272/2008

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**SECTION 4: FIRST AID MEASURES****4.1. DESCRIPTION OF FIRST AID MEASURES**

**First-aid measures general:** If you feel unwell after used with this product, consult a physician. Show this safety data sheet to the doctor in attendance.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.

**Ingestion:** DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label. Wash out mouth with water and drink minimum half a litre of water immediately.

**Skin contact:** Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.

**Eye contact:** Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention.

**4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

**Inhalation:** Harmful by inhalation. May cause respiratory tract irritation.

**Ingestion:** Harmful if swallowed. May causes vomiting and nausea.

**Skin contact:** May cause irritation and dermatitis to skin.

**Eye contact:** May cause irritation to eyes.

**4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED**

Treat symptomatically.



## SECTION 5: FIREFIGHTING MEASURES

### 5.1. EXTINGUISHING MEDIA

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical powder, fog or foam.

Unsuitable extinguishing media: No information available.

### 5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Thermal decomposition can lead to release of irritating gases and vapours. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), sodium oxides.

### 5.3. ADVICE FOR FIRE-FIGHTERS

Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode. Wear appropriate clothing.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear suitable protective equipment. Splash goggles, protective suit, boots and gloves to prevent any contamination of skin, eyes and personal clothing. Select appropriate protective clothing for the size of the spillage. Ensure adequate ventilation of the working area. Avoid contact with skin and eyes. Avoid formation of dust. Avoid breathing dust, vapours, mist or gas.

### 6.2. ENVIRONMENTAL PRECAUTIONS

Should not be released into the environment. Keep away from drains, surface and ground water. Prevent further leakage or spillage if safe to do so.

### 6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Sweep up and shovel. Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

**SECTION 7: HANDLING AND STORAGE****7.1. PRECAUTIONS FOR SAFE HANDLING**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

**7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

**7.3. SPECIFIC END USE(S)**

See section 1.2.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. CONTROL PARAMETERS/EXPOSURE GUIDELINES**

Occupational Exposure Limit Values (Sodium Benzoate) GB:

CAS NO	Exposure limit	Value	Name of Agent
532-32-1	Systemic	3 mg/m <sup>3</sup>	dust
532-32-1	Local	0.1 mg/ m <sup>3</sup>	dust

**Engineering controls:** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before breaks and at the end of the working day. Keep away from foodstuffs, beverages and feed.

**Protective equipment:** Use protective goggles (European standard - EN 166), gloves (European standard - EN 374) and long sleeved clothing to prevent skin, body and eyes exposure.



PROTECTION WEAR



HAND PROTECTION



EYE PROTECTION



RESPIRATOR

- Respiratory equipment:** No protective equipment is needed under normal use conditions but in case of insufficient ventilation, wear suitable respiratory with P1 filter.
- Skin and body protection:** Handle with gloves. Gloves 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. Wear impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Eye/Face protection:** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Powder
Colour:	White
Odour:	Odourless
Initial boiling point (°C):	Not available
Melting point (°C):	410 °C
Freezing point:	No data available



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Relative density:	1.497 g/cm <sup>3</sup>
Specific gravity / density:	Not available
Vapour density:	Not available
Vapour pressure:	Not available
Flash point (°C):	Not applicable
Molecular mass:	144.105 g/mol
Auto-ignition temperature:	Not applicable
Oxidizing properties:	Not applicable
Decomposition temperature:	Not available
Molecular formula:	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. REACTIVITY

No decomposition if stored and applied as directed.

### 10.2. CHEMICAL STABILITY

Sodium Benzoate is stable under normal temperature conditions and under recommended usage and storage.

### 10.3. POSSIBILITY OF HAZARDOUS REACTIONS

May reacts with strong acid and strong oxidizers.

### 10.4. CONDITIONS TO AVOID

Keep away from moisture, heat, direct sunlight and sources of ignition. Avoid dust formation.

### 10.5. INCOMPATIBLE MATERIALS

Avoid strong oxidising agents and acids.

### 10.6. HAZARDOUS DECOMPOSITION

Thermal decomposition can lead to release of irritating gases and vapours. Hazardous Combustion Products: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), sodium oxides.



## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

<b>TOXIC DOSE</b>	<b>LD50 Oral – Rat – 4070 mg/kg</b>
	<b>LD50 Dermal – Rat – &gt; 2000 mg/kg</b>
	<b>LC50 Inhalation – Rat – 12.2 mg/l</b>

<b>Inhalation:</b>	Harmful by inhalation. May cause respiratory tract irritation.
<b>Ingestion:</b>	Harmful if swallowed. May causes vomiting and nausea.
<b>Skin contact:</b>	May cause irritation and dermatitis to skin.
<b>Eye contact:</b>	May cause irritation to eyes.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. TOXICITY

<b>Aquatic Toxicity to fish:</b>	LC50/96h: 484 mg/l Pimephales promelas
<b>Aquatic Toxicity to water flea:</b>	EC50/48h: 650 mg/l Daphnia magna

### 12.2. PERSISTENCE AND DEGRADABILITY

Sodium Benzoate is readily biodegradable.

### 12.3. BIOACCUMULATIVE POTENTIAL

Bioaccumulation is unlikely.

### 12.4. MOBILITY

The product is water soluble, and may spread in water systems . Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

### 12.5. RESULTS OF PBT AND vPvB ASSESSMENT

This product is not identified as a PBT/vPvB substance.

### 12.6. OTHER ADVERSE EFFECTS

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.



**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste disposal recommendations:** Disposal of Sodium Benzoate should be in accordance with local and national legislation. Processing, use or contamination of this product may change the waste management options. Should not be released into the environment. Dispose of container and unused contents in accordance with applicable member state and local requirements.

**Uncleaned packaging:** Disposal must be made according to official regulations.

**SECTION 14: TRANSPORT INFORMATION****IMDG**

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

**ADR/RID**

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

**IATA**

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

**SECTION 15: REGULATORY INFORMATION****15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

The Carriage of Dangerous Goods (Classification Packaging & Labelling) & Use of Transportable Pressure Receptacles Regulations 1996/2092. (As Amended)

CLP - Classification, Labelling and Packing Regulation [Regulation (EC) No. 1272/2008]



## 15.2 CHEMICAL SAFETY ASSESSMENT

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

### General information

The information contained in this safety data sheet is provided in accordance with the requirements of the regulations. The product should not be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instruction. As the specific conditions of use of the product are outside the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

### Revision Comments

This information is provided in a revised format to that previously produced.

Revision Date: 01/10/2018

Revision: 01

Safety Data Sheet Status Approved.

Date printed 01/10/2018

Signature Initials P.K.

### DISCLAIMER:

If this product is re-distributed and re-formulated for sale, details of its hazards and recommended methods for safe handling must be passed to customers. Customers are urged to ensure that the product is entirely suitable for their own purpose. It is the customer's responsibility to ensure that a suitable and sufficient assessment of the risks created by a work activity using this product is undertaken before this product is used.

### NOTE:

The information contained in this Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other Health & Safety Legislation (e.g. the Health and Safety at Work Act,1974;the control of Substances Hazardous to Health Regulations,1988). The data given here is based on current knowledge and experience. The purpose of this data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.