

# SAFETY DATA SHEET



Revision date: 02-Nov-2023

Revision Number 6

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product identifier

**Product Name** SODIUM BENZOATE

**Product Code(s)** 000000034361

### Other means of identification

**CAS No.** 532-32-1

**Synonyms** Sodium Benzoate NF FCC USP DF; Sodium Benzoate Prill WYI BP; Sodium Benzoate BP Powder; AASOD33200

### Recommended use of the chemical and restrictions on use

**Recommended use** Pharmaceutical, food and cosmetic applications.

**Uses advised against** No information available

### Supplier

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia  
ABN:51 600 546 512  
70 Marple Avenue  
Villawood NSW 2163  
Australia

Telephone Number: +61 2 8717 2929

Facsimile: +61 2 9755 9611

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

### GHS Classification

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

**Serious eye damage/eye irritation**

Category 2

**SIGNAL WORD**

Warning

**Label elements**

Exclamation mark

**Hazard statements**

H319 - Causes serious eye irritation

**Precautionary Statements - Prevention**

Wash eyes thoroughly after handling.

Wear eye/face protection

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

**Precautionary Statements - Storage**

No storage statements

**Precautionary Statements - Disposal**

No disposal statements.

**Other hazards which do not result in classification**

May be harmful if swallowed

Harmful to aquatic life

**General Hazards**

Dust can form an explosive mixture with air

**Poisons Schedule (SUSMP)**

None allocated

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Chemical name	CAS No.	Weight-%
Sodium benzoate	532-32-1	100

**4. FIRST AID MEASURES****Description of first aid measures****General advice**

For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

**Inhalation**

Remove to fresh air. Call a physician if symptoms occur.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact**

Wash skin with soap and water. Get medical attention immediately if symptoms occur.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Irritation. May cause redness and tearing of the eyes.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE FIGHTING MEASURES****Suitable Extinguishing Media**

**Suitable Extinguishing Media** Dry chemical, CO<sub>2</sub>, water spray or regular foam. Carbon dioxide (CO<sub>2</sub>) may be ineffective on large fires.

**Unsuitable extinguishing media** High volume water jet.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Combustible solid. Dust can form an explosive mixture with air. Most organic dusts are combustible and according to the circumstances under which the combustion process occurs, such materials may cause fires and/or dust explosions. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions). Dusts in the form of a cloud are only ignitable over a range of concentrations; in principle, the concepts of lower explosive limit (LEL) and upper explosive limit (UEL) are applicable to dust clouds but only the LEL is of practical use; - this is because of the inherent difficulty of achieving homogeneous dust clouds at high temperatures (for dusts the LEL is often called the "Minimum Explosible Concentration", MEC).  
When processed with flammable liquids/vapors/mists, ignitable (hybrid) mixtures may be formed with combustible dusts. Ignitable mixtures will increase the rate of explosion pressure rise and the Minimum Ignition Energy (the minimum amount of energy required to ignite dust clouds - MIE) will be lower than the pure dust in air mixture. The Lower Explosive Limit (LEL) of the vapour/dust mixture will be lower than the individual LELs for the vapors/mists or dusts.  
Usually the initial or primary explosion takes place in a confined space such as plant or machinery, and can be of sufficient force to damage or rupture the plant. If the shock wave from the primary explosion enters the surrounding area, it will disturb any settled dust layers, forming a second dust cloud, and often initiate a much larger secondary explosion. All large-scale explosions have resulted from chain reactions of this type. Dry dust can be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport. Build-up of electrostatic charge may be prevented by bonding and grounding. Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting. A sudden release of statically charged materials from storage or process equipment, particularly at elevated temperatures and/ or pressure, may result in ignition especially in the absence of an apparent ignition source. One important effect of the particulate nature of powders is that the surface area and surface structure (and often moisture content) can vary widely from sample to sample, depending on how the powder was manufactured and handled which means that it is virtually impossible to use flammability data published in the literature for dusts.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

**Special protective actions for fire-fighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin and eyes. Avoid breathing dust or spray mist. Avoid generation of dust. Ensure adequate ventilation. Do not touch or walk through spilled material. Evacuate personnel to safe areas. Use personal protective equipment as required. Wash thoroughly after handling. Take precautionary measures against static discharges.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use non-sparking tools.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Avoid contact with skin and eyes. Avoid breathing dust or spray mist. Avoid generation of dust. Use personal protection equipment. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take precautionary measures against static discharges. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store away from sources of heat or ignition. Keep container closed when not in use.

**Incompatible materials** Oxidizing agents. Strong acids. Iron salts.

**Poisons Schedule (SUSMP)** None allocated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Limits** No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

Dusts not otherwise classified: 8hr TWA = 10 mg/m<sup>3</sup>

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls**

**Engineering controls**

Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

**Individual protection measures, such as personal protective equipment**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.



**Eye/face protection**

Goggles.

**Skin and body protection**

Overalls. Wear suitable protective clothing. Boots.

**Hand protection**

Impervious gloves.

**Respiratory protection**

If determined by a risk assessment an inhalation risk exists, wear a dust mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

**Environmental exposure controls**

No information available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Solid
<b>Appearance</b>	Grains
<b>Color</b>	White
<b>Odor</b>	Odourless
<b>Odor threshold</b>	No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	8 (10% aqueous solution)	None known
<b>pH (as aqueous solution)</b>	No data available	None known

<b>Melting point / freezing point</b>	436°C	None known
<b>Boiling point / boiling range</b>	Decomposes before boiling	None known
<b>Flash point</b>	Not applicable	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	Negligible @20°C	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	1.5 @20°C	None known
<b>Water solubility</b>	556 g/L	None known
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	450-475°C	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

Other information**10. STABILITY AND REACTIVITY**Reactivity

**Reactivity** Hygroscopic: absorbs moisture or water from surrounding air.

Chemical stability

**Stability** Stable under normal conditions.

Explosion data

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Possibility of hazardous reactions

**Possibility of hazardous reactions** If suspended in air (dust cloud) fine grades may be ignited in the presence of an ignition source.

**Hazardous polymerization** Hazardous polymerization does not occur.

Conditions to avoid

**Conditions to avoid** Heat, flames and sparks. Static discharge (electrostatic discharge). Dust formation. Moisture.

Incompatible materials

**Incompatible materials** Oxidizing agents. Strong acids. Iron salts.

Hazardous decomposition products

**Hazardous decomposition products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity****Information on likely routes of exposure**

**Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

<b>Inhalation</b>	May cause irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Skin contact</b>	May cause irritation.
<b>Ingestion</b>	May cause irritation. May be harmful if swallowed.

**Symptoms** Irritation. May cause redness and tearing of the eyes.

**Numerical measures of toxicity - Product Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium benzoate	= 4070 mg/kg ( Rat )	-	-

See section 16 for terms and abbreviations

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Not classified.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	Not classified.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not classified.
<b>Reproductive toxicity</b>	Not classified.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

**Ecotoxicity** Keep out of waterways. Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium benzoate	-	LC50: 420 - 558mg/L	-	EC50: <650mg/L (48h,

		(96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas)		Daphnia magna)
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**Persistence and degradability**

**Persistence and degradability**      Readily biodegradable.

**Bioaccumulative potential**

**Bioaccumulation**      No information available.

Chemical name	Partition coefficient
Sodium benzoate	-2.13

**Mobility**

**Mobility in soil**      No information available.

**Other adverse effects****13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Waste from residues/unused products**      Can be landfilled or incinerated, when in compliance with local regulations.

**Contaminated packaging**      Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. TRANSPORT INFORMATION****ADG**

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

**IATA**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

**IMDG**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

**15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Australia**

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail



(ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

**Poisons Schedule (SUSMP)** None allocated**National pollutant inventory**

Subject to reporting requirement

Chemical name	National pollutant inventory
Sodium benzoate - 532-32-1	20 MW Threshold category 2b total 60000 MWH Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total 400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total

**International Inventories****AIIC**

This material is listed on the Australian Inventory of Industrial Chemicals.

**NZIoC**

This material is listed on the New Zealand Inventory of Chemicals.

**Legend:****AIIC- Australian Inventory of Industrial Chemicals****NZIoC - New Zealand Inventory of Chemicals****International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**16. OTHER INFORMATION**

Supplier Safety Data Sheet 02/ 2023

Purox is a trademark owned by Emerald Performance Materials, LLC.

**Reason(s) For Issue:** 5 Yearly Revised Primary SDS**Issuing Date:** 02-Nov-2023

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

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EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.**

**Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris and Australian Botanical Products.**

**End of Safety Data Sheet**