SAFETY DATA SHEET

Revision date: 10-Oct-2024



Revision Number 3

Section 1: Identification	
Product identifier	
Product Name	SODIUM FORMATE
Product Code(s)	00000025403
Other means of identification	
CAS No.	141-53-7
Pure substance/mixture	Substance
Recommended use of the chemica	Il and restrictions on use
Recommended use	Pharmaceutical applications.
Uses advised against	No information available.
Details of manufacturer or importe	<u>ir</u>
Supplier Ixom Operations Pty Ltd (Bronson & ABN:51 600 546 512 70 Marple Avenue Villawood NSW 2163 Australia	Jacobs division) - incorporated in Australia
Telephone Number: +61 2 8717 2929 Facsimile: +61 2 9755 9611	Э
Emergency telephone number	
Emergency telephone number	1 800 033 111 (ALL HOURS)
Please ensure you refer to the limitations of this	s Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.
Section 2: Hazard identified	cation
(GHS).	nce in accordance with the criteria of Safe Work Australia - Globally Harmonized System by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and

GHS Classification

Label elements

Signal word None

Other hazards which do not result in classification

May be harmful if swallowed.

May form combustible dust concentrations in air.

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Sodium formate	141-53-7	>=98

Section 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. If symptoms persist, call a physician.	
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. If symptoms persist, call a physician.	
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Get medical attention if symptoms occur.	
Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	
Effects of Exposure	No information available.	
Indication of any immediate medical attention and special treatment needed		

Note to physicians Treat symptomatically.

Section 5: Firefighting measures

Suitable Extinguishing MediaSuitable extinguishing mediaDry chemical, CO2, water spray or regular foam.Unsuitable extinguishing mediaDo not use straight streams.Specific hazards arising from the chemicalCombustible solid. Dusts or fumes may form explosive mixtures in air. Avoid generation of dust. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Oxides of carbon.

Special protective actions for fire-fighters

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

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Avoid generation of dust. Ensure adequate ventilation. Evacuate personnel to safe areas. Use personal protective equipment as required. Remove all sources of ignition. All equipment used when handling the product must be grounded. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Wash thoroughly after handling. Avoid breathing dust or spray mist.	
Other information	Ventilate the area.	
For emergency responders	Shut off ignition sources. Clear area of all unprotected personnel. Use personal protection recommended in Section 8.	
Environmental precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for containment	Stop leak if you can do it without risk. Dike far ahead of spill to collect runoff water. Do not touch or walk through spilled material. Keep out of drains, sewers, ditches and waterways. Remove ignition sources. Provide adequate ventilation.	
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.	

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handlingAvoid contact with skin, eyes or clothing. Use personal protection equipment. Fine dust
dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a
potential dust explosion hazard. Avoid generation of dust. Keep away from heat, hot
surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond all
lines and equipment associated with product system. All equipment should be
non-sparking and explosion proof. Take precautionary measures against static discharges.
Wash thoroughly after handling. Handle in accordance with good industrial hygiene and
safety practice. Avoid breathing dust or spray mist.General hygiene considerationsRemove and wash contaminated clothing and gloves, including the inside, before re-use.
Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of
equipment, work area and clothing is recommended. Wash hands and face before breaks
and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear
suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat,
--------------------	---

sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Protect from moisture. Keep container closed when not in use.

Incompatible materials Strong oxidizing agents.

Section 8: Exposure controls and 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/m³

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

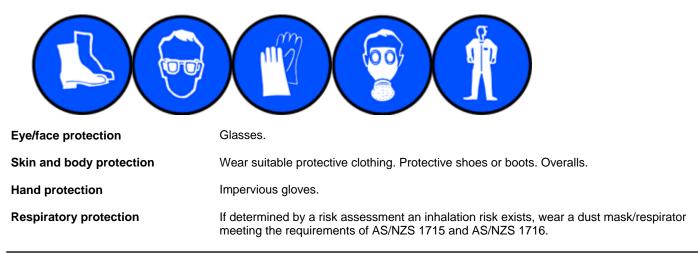
Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

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, SAFETY GLASSES, GLOVES, DUST MASK.



Environmental exposure controls	No information available.

Thermal hazards No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Appearance Color Odor Odor threshold	Solid Crystalline Powder White Characteristic No information available	
Property_	Values	Remarks • Method
pH	9 - 10	50 g/L @ 20 °C
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	255 °C	None known
Boiling point / boiling range	No data available	None known
Flash point	Not Applicable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.92	@ 20 °C
Water solubility	820	g/L @ 20 °C
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information		

Other information

Section 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 impac Sensitivity to static discharge	t None. 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 None under normal processing.

Conditions to avoid

Conditions to avoid Static discharge (electrostatic discharge). Dust formation. Moisture.

Incompatible materials

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

Section 11: Toxicological information

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:
Inhalation	May cause irritation. Breathing in dust may result in respiratory irritation.
Eye contact	May cause irritation. Dust contact with the eyes can lead to mechanical irritation.
Skin contact	May cause irritation.
Ingestion	May cause gastrointestinal discomfort if consumed in large amounts.
Symptoms	No information available.

Acute toxicity May be harmful if swallowed.

Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium formate	= 3000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 0.67 mg/L (Rat)4 h
See section 16 for terms and abbrevia	ations		
Delayed and immediate effects as well as chronic effects from short and long-term exposure			
Skin corrosion/irritation	Not classified.		
Serious eye damage/eye irritation	Not classified.		
Senous eye damage/eye initation	Not classified.		
Respiratory or skin sensitization	Not a skin sensitiser (guinea pig). Read-across (analogy).		
Germ cell mutagenicity	Not mutagenic.		
Carcinogenicity	No information available.		

Reproductive toxicity	This product does not contain any known or suspected reproductive hazards.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	Not applicable.

Section 12: Ecological information

Ecotoxicity		
Aquatic ecotoxicity	Avoid contaminating waterways.	
Terrestrial ecotoxicity	There is no data for this product.	
Persistence and degradability		
Persistence and degradability	Biodegradable.	
Bioaccumulative potential		
· · · · · · · · · · · · · · · · · · ·	These is we dote for this was dont	
Bioaccumulation	There is no data for this product.	
<u>Mobility</u>		
Mobility	No information available.	
Other adverse effects		
Other adverse effects	No information available.	
Section 13: Disposal considerations		
Waste treatment methods		
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.	
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Dispose of in accordance with federal, state and local regulations.	
See section 8 for more information		

Section 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.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

Section 15: Regulatory information

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

National regulations

Australia

Not classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

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.

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Poison Schedule Number Not applicable

Australian Industrial Chemicals Introduction Scheme (AICIS)

	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Sodium formate - 141-53-7	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory	
Sodium formate - 141-53-7	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.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.

Legend:

AIIC AIIC- Australian Inventory of Industrial Chemicals

NZIOC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

- EINECS/ELINCS European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

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

Section 16: Other information

Supplier Safety Data Sheet; 01/2017

Reason(s) For Issue:	5 Yearly Revised Primary SDS	
Prepared By	This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).	
Revision date:	10-Oct-2024	

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

SVHC: Substances of Very High Concern for Authorization: PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances STOT: Specific Target Organ Toxicity ATE: Acute Toxicity Estimate LC50: 50% Lethal Concentration LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) **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) National Institute of Technology and Evaluation (NITE) Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) 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) U.S. 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 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