

SAFETY DATA SHEET



Revision date: 11-Aug-2023

Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name PRADSIL-400

Product Code(s) 000000054491

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Mineral Processing Aid.

Uses advised against No information available

Supplier

Ixom Operations Pty Ltd
ABN: 51 600 546 512
Level 8, 1 Nicholson Street
Melbourne 3000
Australia

Telephone Number: +61 3 9906 3000

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
Skin sensitization	Category 1

SIGNAL WORD

Warning

Label elements

Exclamation mark

**Hazard statements**

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

Precautionary Statements - Prevention

Avoid breathing dust / fume / gas / mist / vapours / spray

Contaminated work clothing should not be allowed out of the workplace

Wash eyes thoroughly after handling.

Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see First aid on this SDS)

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

Take off contaminated clothing and wash before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification**Poisons Schedule (SUSMP)** None allocated**3. COMPOSITION/INFORMATION ON INGREDIENTS****Mixture**

Chemical name	CAS No.	Weight-%
3-nitrobenzenesulphonate, sodium salt.	127-68-4	>60
non-hazardous components	-	to 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. If breathing is difficult, (trained personnel should) give oxygen. If symptoms persist, call a physician.

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Do not rub affected area. If eye irritation persists: Get medical advice/attention.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

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 Irritation. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. May cause sensitization by skin contact.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO₂). Foam.

Unsuitable extinguishing media High volume water jet.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Over 350°C the material will burn and support combustion. Hazardous decomposition products include oxides of nitrogen, oxides of sulfur, carbon monoxide and some metal oxides.

Hazardous combustion products Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Metal oxides.

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. Do not touch or walk through spilled material. Avoid generation of dust. Ensure adequate ventilation. Evacuate personnel to safe areas. Wash thoroughly after handling. Use personal protective equipment as required.

For emergency responders 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. Prevent product from entering drains. 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. Remove ignition sources. Provide adequate ventilation.

Methods for cleaning up Slippery when spilt. Avoid accidents, clean up immediately. Avoid generation of dust. Cover with damp absorbent (inert material, sand or soil). Sweep up and shovel into suitable containers for disposal. Use personal protective equipment as required. Pick up and transfer to properly labelled containers.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling**

Avoid contact with skin, eyes, and clothing. Avoid breathing dust or spray mist. Avoid generation of dust. Take off contaminated clothing and wash before reuse. Use personal protection equipment. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice.

General hygiene considerations

Regular cleaning of equipment, work area and clothing is recommended. Wash hands and face before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep containers tightly closed in a cool, well-ventilated place. Protect from sunlight. Store away from incompatible materials described in Section 10. Keep container closed when not in use. Protect from moisture.

Incompatible materials

Strong oxidizing agents. Metals such as: brass, copper, nickel, cadmium.

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/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, CHEMICAL GOGGLES, GLOVES, DUST MASK.



Eye/face protection

Goggles.

Skin and body protection

Wear suitable protective clothing. Boots. Overalls.

Hand protection

Impervious gloves.

Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator 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

Physical state	Solid
Appearance	Granules Prills
Color	Cream Coloured
Odor	Faint Caramel
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Approx. 8 (in 5% solution)	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	Not Applicable	None known
Flash point	>100 °C	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	Not Applicable	
Lower flammability or explosive limits	Not Applicable	
Vapor pressure	Not Applicable	None known
Vapor density	Not Applicable	None known
Relative density	0.75	None known
Water solubility	No data available	None known
Solubility(ies)	Soluble in water	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

10. STABILITY AND REACTIVITY

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Avoid dust generation. Exposure to air. Avoid exposure to moisture.

Incompatible materials

Incompatible materials Strong oxidizing agents. Metals such as: brass, copper, nickel, cadmium.

Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Metal oxides.

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:

Inhalation May cause irritation.

Eye contact Causes serious eye irritation. Dust contact with the eyes can lead to mechanical irritation.

Skin contact May cause irritation. May cause sensitization by skin contact.

Ingestion May cause gastrointestinal discomfort if consumed in large amounts.

Symptoms Irritation. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

Numerical measures of toxicity - Product Information

Oral LD50 >11000 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

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	Causes serious eye irritation. Classification is based on mixture calculation methods based on component data.
Respiratory or skin sensitization	May cause sensitization by skin contact. Classification is based on mixture calculation methods based on component data.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Ecotoxicity Avoid contaminating waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
3-nitrobenzenesulphonate, sodium salt.	EC50: >500mg/L (72h, <i>Desmodesmus subspicatus</i>)	LC50: <1350mg/L (24h, <i>Lepomis macrochirus</i>) LC50: >500mg/L (96h, <i>Leuciscus idus</i>)	-	LC50: =8665mg/L (48h, <i>Daphnia magna</i>)

Persistence and degradability

Persistence and degradability Biodegradable.

Bioaccumulative potential

Bioaccumulation Bioaccumulation is not expected.

Component Information

Chemical name	Partition coefficient
3-nitrobenzenesulphonate, sodium salt.	-2.61

Mobility

Mobility in soil No information available.

Other adverse effects**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	Dispose of in accordance with federal, state and local regulations.

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

International Inventories

AIIC Contact supplier for inventory compliance status.

Legend:

AIIC- Australian Inventory of Industrial 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 10/ 2018

Reason(s) For Issue: First Issue Primary SDS

Issuing Date: 11-Aug-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

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 Ixom 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.

End of Safety Data Sheet