SAFETY DATA SHEET

Revision date: 18-Dec-2023

Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name DIPEROX POWDER

Product Code(s) 000000054592

Other means of identification

UN number 3087

Recommended use of the chemical and restrictions on use

Recommended use Swimming pool sanitiser.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier
Ixom Operations Pty Ltd (Incorporated in Australia)
NZBN: 9429041465226 Address: 166 Totara Street
Mt Maunganui South
New Zealand

Telephone Number: +64 9 368 2700
Facsimile: +64 9 368 2710

For further information, please contact

Contact Point Product Safety Department

Emergency telephone number

Emergency Telephone **0 800 734 607 (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

Classified as a Dangerous Good according to NZS 5433 Transport of Dangerous Goods on Land; DANGEROUS GOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

GHS Classification

SIGNAL WORD
Danger

Oxidising Liquids and Solids (Acutely Toxic) Group Standard 2020
Approval Number: HSR002634

Oxidizing solids	Category 2
Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 2

Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Label elements

Hazard statements
H272 - May intensify fire; oxidizer
H301 - Toxic if swallowed
H310 - Fatal in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H330 - Fatal if inhaled
H360 - May damage fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep/Store away from clothing/ combustible materials
Take any precaution to avoid mixing with combustibles
Do not breathe dusts or mists
Wash hands thoroughly after handling
Wash eyes thoroughly after handling.
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Use personal protective equipment as required
Wear protective gloves / protective clothing / eye protection / face protection
Wear respiratory protection
Contaminated work clothing must not be allowed out of the workplace
Avoid release to the environment
Precautionary Statements - Response
If exposed or concerned: Get medical advice/attention
Get medical advice/attention if you feel unwell
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 or doctor/physician
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

Collect spillage
Precautionary Statements - Storage
Store locked up
Precautionary Statements - Disposal
Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%
Sodium chlorite	7758-19-2	25-50
Sodium chlorate	7775-09-9	15-25
Non hazardous component(s)	-	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. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Emergency telephone number Poisons Information Center, New Zealand: 0800 764 766
Poisons Information Center, Australia: 13 11 26

Inhalation Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, (trained personnel should) give oxygen. If breathing is irregular or stopped, administer artificial respiration. Call a physician if symptoms occur.

Eye contact In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Immediately call a POISON CENTER or doctor.

Skin contact Wash off immediately with plenty of water. Call a physician if symptoms occur.

Ingestion Clean mouth with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. 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/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). May cause allergic skin reaction. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. Can cause corneal burns. May cause sensitization by skin contact. Delayed pulmonary edema may occur.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Water. Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Promotes the combustion (oxidizer). Can cause fire and explosion when in contact with flammable substances. Any material contaminated with the product (e.g. clothes) ignites easily and burns vigorously - increased fire hazard. Environmentally hazardous.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters Contact with acid or chlorine will produce chlorine dioxide gas. The Lower Explosive Limit (LEL) for chlorine dioxide is 10%. The chlorine dioxide will dissolve harmlessly in flooding amounts of water.

Hazchem code 1W

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes. Do not breathe dust. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation. Evacuate personnel to safe areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk. Use personal protective equipment as required. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

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. Keep dry. Use non-sparking tools.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Remove all sources of ignition. Avoid contact with skin and eyes. Avoid generation of dust. Do not breathe dust. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Use personal protection equipment. Wash thoroughly after handling. Keep away from contact with clothing and other combustible materials to avoid fire.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a cool, dry, well ventilated place. Protect from sunlight. Protect from moisture. Store away from foodstuffs and sources of heat or ignition. Store locked up. Keep container closed when not in use.

Incompatible materials Strong acids. Alkalis. Reducing agents. Combustible material. Moisture.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for particulates and decomposition product(s):

Particulates not otherwise classified: 8hr WES-TWA 10 mg/m^3 (inhalable dust) or 3 mg/m^3 (respirable dust)
Chlorine dioxide: WES-TWA 0.1 ppm, 0.28 mg/m^3

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

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 Tight sealing safety goggles.

Hand protection	Impervious gloves.
Skin and body protection	Overalls. Wear suitable protective clothing. Boots.
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	Crystalline
Color	White
Odor	Mild Chlorine
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	9-10 (0.01% solution in water)	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	No data available	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	No data available	None known
Water solubility	Soluble in water	None known
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

10. STABILITY AND REACTIVITY

Reactivity

Reactivity	No information available.

Chemical stability

Stability	Stable under recommended storage conditions.

Explosion data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.

Possibility of hazardous reactions

Hazardous polymerization Hazardous polymerization does not occur.

Possibility of hazardous reactions Oxidizing agent. Supports combustion of other materials and increases intensity of a fire. Contact with moisture will produce chlorine dioxide gas. Chlorine dioxide, which may evolve from this product, is explosive in the gaseous phase at concentrations greater than 10% by volume. Do not allow chlorine dioxide gas to accumulate within a confined space.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Dust formation. Moisture. Exposure to light. Contact with foodstuffs. Avoid contact with combustible substances.

Incompatible materials

Incompatible materials Strong acids. Alkalis. Reducing agents. Combustible material. Moisture.

Hazardous decomposition products

Hazardous decomposition products Chlorine dioxide.

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. Fatal if inhaled.

Eye contact Causes serious eye damage.

Skin contact Causes skin irritation. Fatal in contact with skin.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Toxic if swallowed.

Symptoms Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). May cause allergic skin reaction. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity
Refer to component information below.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium chlorite	= 165 mg/kg (Rat)	-	= 230 mg/m³ (Rat) 4 h
Sodium chlorate	= 1200 mg/kg (Rat)	> 2000 mg/kg (Rabbit) > 10 g/kg (Rabbit)	> 5.59 mg/L (Rat) 4.5 h > 28 g/m³ (Rat) 1 h

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 Causes skin irritation. Classification is based on mixture calculation methods based on component data.

Serious eye damage/eye irritation Causes serious eye damage. Classification is based on mixture calculation methods based on component data.

Respiratory or skin sensitization May cause an allergic skin reaction. Classification is based on mixture calculation methods based on component data.

Germ cell mutagenicity No information available.

Carcinogenicity Refer to 'Chronic effects' section below.

Chemical name	New Zealand	IARC
Sodium chlorite - 7758-19-2		Group 3

IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity H360 - May damage fertility or the unborn child. Classification is based on mixture calculation methods based on component data.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure. Classification is based on mixture calculation methods based on component data.

Aspiration hazard No information available.

Chronic effects: Sodium chlorite has been classified by the International Agency for Research on Cancer (IARC) as a Group 3 agent. Group 3 - The agent is not classifiable as to its carcinogenicity to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Keep out of waterways. Very toxic to aquatic life with long lasting effects.

Terrestrial ecotoxicity There is no data for this product.

Chemical name	EarthWorm	Avian	Honeybees
Sodium chlorate	LC50 > 750 mg/kg (Eisenia foetida 14 Days soil dry weight)	-	-

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium chlorite	-	LC50: 100 - 500mg/L (96h, Brachydanio rerio) LC50: >100mg/L (96h, Lepomis macrochirus) LC50: >100mg/L (96h, Oncorhynchus mykiss)	EC50: =0.026mg/L (48h, Daphnia magna) EC50: 0.25 - 0.33mg/L (48h, Daphnia magna) EC50: 0.012 - 0.018mg/L (48h, Daphnia magna)
Sodium chlorate	-	LC50: =13500mg/L (96h, Pimephales promelas) LC50: =1750mg/L (96h, Oncorhynchus mykiss) LC50: =7090mg/L (96h, Cyprinus carpio) LC50: =4200mg/L (24h, Oncorhynchus mykiss)	EC50: =1093mg/L (24h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil No information available.

Other adverse effects

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose of product in packaging/container in a way that is consistent with the Hazardous Substances (Disposal) Notice 2017 and the Act, and Hazardous Substances (Amendments and Revocations) Notice 2020. Treat the chemical using a method that changes the characteristics or composition of the chemical so that the chemical is no longer a hazardous chemical; or export the chemical from New Zealand as waste.

Contaminated packaging Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous chemical (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the chemical to be classified as hazardous (class 6, 8, or 9 chemical). Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT Classified as a Dangerous Good according to NZS 5433 Transport of Dangerous Goods on Land; DANGEROUS GOODS.

UN number 3087
Proper shipping name OXIDIZING SOLID, TOXIC, N.O.S. (CONTAINS SODIUM CHLORITE AND SODIUM CHLORATE)
Hazard class 5.1
Subsidiary hazard class 6.1
Packing group II
Hazchem code 1W

IATA Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 3087
UN proper shipping name OXIDIZING SOLID, TOXIC, N.O.S. (CONTAINS SODIUM CHLORITE AND SODIUM CHLORATE)
Transport hazard class(es) 5.1
Subsidiary hazard class 6.1
Packing group II

IMDG Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number	3087
UN proper shipping name	OXIDIZING SOLID, TOXIC, N.O.S. (CONTAINS SODIUM CHLORITE AND SODIUM CHLORATE)
Transport hazard class(es)	5.1
Subsidiary hazard class	6.1
Packing group	II
Marine pollutant	Yes

15. REGULATORY INFORMATION

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

New Zealand

National regulations The 'Health and Safety at Work (Hazardous Substances) Regulations', 'Hazardous substances that require tracking' are applicable to this material.

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International Inventories

NZIoC	Contact supplier for inventory compliance status.
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.
AIIC	Contact supplier for inventory compliance status.

Legend:
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
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 03/ 2023

Prepared By This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and

SDS Services).

Issuing Date: 18-Dec-2023

Reason(s) For Issue: First Issue Primary SDS

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

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
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