# SAFETY DATA SHEET



Revision date: 16-May-2022

**Revision Number** 1

# **1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER** Product identifier **Product Name** CLEANIX DESCALER ACID METAL CLEANER Product Code(s) 00000054196 Other means of identification **UN number** 3265 CIXFCDSCALA; CIXFCDSCALA-5L. Synonyms Recommended use of the chemical and restrictions on use **Recommended use** Organic acid mineral scale remover. 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 Facimile: +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

Additives, Process Chemicals and Raw Materials (Corrosive) Group Standard 2020 Approval number: HSR002491

#### Skin corrosion/irritation

Category 1 Sub-category C

Category 1

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#### Serious eye damage/eye irritation

Label elements



Hazard statements H314 - Causes severe skin burns and eye damage

#### **Precautionary Statements - Prevention**

Do not breathe dusts or mists Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves / protective clothing / 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 Immediately call a POISON CENTER or doctor/physician IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower 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: Rinse mouth. DO NOT induce vomiting **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**

#### <u>Mixture</u>

Chemical name	CAS No.	Weight-%
Organic acid	-	10-<30
L(+)-Lactic Acid	79-33-4	5-<30
Citric acid	77-92-9	5-<30
Other 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.
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. Get medical attention immediately if symptoms occur.

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Immediate medical attention is required.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Get immediate medical advice/attention.
Ingestion	Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately if symptoms occur.

Most important symptoms and effects, both acute and delayed		
Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically. Can cause corneal burns.	

5. FIRE FIGHTING MEASU	5 FIRE FIGHTING MEASURES		
Suitable Extinguishing Media			
Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.		
Unsuitable extinguishing media	No information available.		
Specific hazards arising from the c	chemical		
Specific hazards arising from the chemical	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.		
Special protective actions for fire-f	ighters		
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.		
Hazchem code	2X		
6. ACCIDENTAL RELEASI	EMEASURES		
Personal precautions, protective e	quipment and emergency procedures		
Personal precautions	Avoid contact with skin, eyes and inhalation of vapors. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling.		
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. Refer to protective measures listed in Sections 7 and 8.
Methods and material for containm	ent and cleaning up
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of spill to collect runoff water. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Keep out of drains, sewers, ditches and waterways.
Methods for cleaning up	Soak up with inert absorbent material. Use personal protective equipment as required. Pick up and transfer to properly labelled containers.
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	Use personal protection equipment. Avoid breathing vapors or mists. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.	
General hygiene considerations	Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.	
Conditions for safe storage, including any incompatibilities		
Storage Conditions	Keep containers tightly closed in a cool, well-ventilated place. Protect from direct sunlight. Store away from foodstuffs. Keep container closed when not in use.	
Incompatible materials	Strong bases. Hypochlorites. Metals.	

# 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 constituent(s):

Phosphoric acid: WES-TWA 1 mg/m<sup>3</sup>

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** 

Ensure that eyewash stations and safety showers are close to the workstation location. 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, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.

Eye/face protection	Tight sealing safety goggles. If splashes are likely to occur:. Face protection shield.
Hand protection	Elbow-length impervious gloves.
Skin and body protection	Wear suitable protective clothing. Overalls. Boots.
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate 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

internation on bacie physical and c	nonnour properties
Physical state	Liquid
Appearance	Clear
Color	Colourless
Odor	Characteristic
Odor threshold	No information availa
Property_	Values
рН	1.1
Melting point / freezing point	No data available
Boiling point / boiling range	No data available
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Flammability Limit in Air	
Upper flammability or explosive limits	No data available

able.

#### Remarks • Method

None known None known None known None known None known None known None known

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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	Miscible 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 REAC	TIVITY
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	Contact with foodstuffs.
Incompatible materials	
Incompatible materials	Strong bases. Hypochlorites. Metals.
Hazardous decomposition products	
Hazardous decomposition product	<b>s</b> Carbon oxides. Phosphorus 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	Inhalation may cause severe respiratory irritation and pulmonary edema.

Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	Contact causes severe skin irritation and possible burns. Causes severe burns.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Can burn mouth, throat, and stomach.
Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes.
Acute toxicity	

## Numerical measures of toxicity

Refer to component information below.

## **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
L(+)-Lactic Acid	3543 mg/kg bodyweight (EPA	> 2000 mg/kg bodyweight (EPA	> 7.94 mg/l/4h (OECD 403
	OPP 81-1 method)	OPP 81-2 method)	method)
Citric acid	= 3000 mg/kg (Rat)	> 2000 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	Causes burns. 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	No information available.
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** Keep out of waterways. Avoid contaminating waterways.

Terrestrial ecotoxicity There is no data for this product.

Chemical name	Algae/aquatic plants	Fish	Crustacea
L(+)-Lactic Acid	EC50: =3.5mg/L (70h,	LC50: =320mg/L (96h, Brachydanio	EC50: =240mg/L (48h, Daphnia

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	Pseudokirchneriella subcapitata)	rerio) LC50: 100 - 180mg/L (96h,	magna) EC50: 180 - 320mg/L (48h,
		Lepomis macrochirus) LC50: 100 -	Daphnia magna)
		180mg/L (96h, Oncorhynchus	
		mykiss)	
Citric acid	-	LC50: =1516mg/L (96h, Lepomis	EC50: =120mg/L (72h, Daphnia
		macrochirus)	magna)

## Persistence and degradability

Persistence and degradability	No information available.
Bioaccumulative potential	
Bioaccumulation	No information available.
<u>Mobility</u>	

Mobility in soil

No information available.

#### **Component Information**

Chemical name	Partition coefficient
L(+)-Lactic Acid	-0.62
Citric acid	-1.72

## 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. Class 6 and 8 chemicals – may be discharged into the environment if a tolerable exposure limit has been set for the substance (or a component of that chemical); and the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the tolerable exposure limit. If there is not tolerable exposure limit for the substance, then it may only be discharged into the environment if the substance is very rapidly converted to substances that are not hazardous substances.
Contaminated packaging	For packages that have been in direct contact with hazardous chemicals, the person must ensure that the package is rendered incapable of containing any chemical. It must be disposed of in a manner that is consistent with the requirements for disposal of the chemical that it contained, taking into account the material the package is manufactured from. 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).

# **14. TRANSPORT INFORMATION**

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

UN number	3265
Proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS LACTIC ACID)
Hazard class	8
Packing group	III
Hazchem code	2X
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	3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS LACTIC ACID)
Transport hazard class(es)	8
Packing group	III
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	3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS LACTIC ACID)
Transport hazard class(es)	8
Packing group	III
IMDG EMS Fire	F-A
IMDG EMS Spill	S-B

# **15. REGULATORY INFORMATION**

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

New Zealand	
National regulations	See section 8 for national exposure control parameters
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	Chomicals
	nces Control Act Section 8(b) Inventory
	ubstances List/Non-Domestic Substances List
	tory of Existing Chemical Substances/European List of Notified Chemical Substances
<b>ENCS</b> - Japan Existing and New Ch	
<b>IECSC</b> - China Inventory of Existing	
<b>KECL</b> - Korean Existing and Evaluated Chemical Substances	
DICC Divinging Investory of Chemical and 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 06/ 2020

Prepared By	This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).	
Issuing Date:	16-May-2022	
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
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) 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 lxom 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