# **SAFETY DATA SHEET**



Revision date: 11-Aug-2023

**Revision Number** 1

# 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name ENVIRO ACID NPF

**Product Code(s)** 000000054492

Other means of identification

UN number 3265

Recommended use of the chemical and restrictions on use

Recommended use Cleaning agent.

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

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).

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

#### **SIGNAL WORD**

Danger

# Label elements

#### Corrosion



#### **Hazard statements**

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

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

Keep only in original container

Do not breathe fume, gas, mist, vapours, spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear protective gloves / protective clothing / eye protection / face protection

### **Precautionary Statements - Response**

Specific treatment (see First aid on this SDS)

Specific measures (see First aid on this label)

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 water and soap

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

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Absorb spillage to prevent material damage

# **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Store in corrosive resistant container with a resistant inner liner

# **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

May be harmful if swallowed

Poisons Schedule (SUSMP)

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical name	CAS No.	Weight-%
Methane sulfonic acid	75-75-2	10-<30
L(+)-Lactic Acid	79-33-4	10-<30
Formic acid	64-18-6	1-<10
Other component(s)	-	to 100

### 4. FIRST AID MEASURES

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#### **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.

Inhalation Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If

breathing has stopped, give artificial respiration. Get medical attention immediately.

**Eye contact**Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/Take off

immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a

POISON CENTER or doctor/physician.

**Ingestion** Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water.

Never give anything by mouth to an unconscious person. Get immediate medical

advice/attention.

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

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

Burning. Coughing and/ or wheezing. Difficulty in breathing.

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

Note to physicians Treat symptomatically. Can cause corneal burns.

### 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 chemical

Specific hazards arising from the

chemical

Corrosive hazard. Wear protective gloves/clothing and eye/face protection. The product

causes burns of eyes, skin and mucous membranes. Non-combustible.

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.

Hazchem code 2X

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

**Personal precautions**Do not breathe fume, gas, mist, vapours, spray. Ensure adequate ventilation. Evacuate

personnel to safe areas. Stop leak if you can do it without risk. Do not touch or walk through spilled material. Do not eat, drink or smoke when using this product. Use personal

protective equipment as required. Wash thoroughly after handling.

**Environmental precautions** 

**Environmental precautions**Local authorities should be advised if significant spillages cannot be contained.

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 a non-combustible material like vermiculite, sand or earth to soak up the product and

place into a container for later disposal.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Advice on safe handling Do not breathe fume, gas, mist, vapours, spray. Avoid contact with skin, eyes, and clothing.

Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Use

personal protection equipment. Wash thoroughly after handling.

#### Conditions for safe storage, including any incompatibilities

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

foodstuffs. Keep container closed when not in use.

**Incompatible materials** Strong alkalis. Metals.

Poisons Schedule (SUSMP) 5

### 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 constituent(s):

Formic acid:  $8hr TWA = 9.4 \text{ mg/m}^3 (5 \text{ ppm}), 15 \text{ min STEL} = 19 \text{ mg/m}^3 (10 \text{ ppm})$ 

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.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

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.











Tight sealing safety goggles. If splashes are likely to occur:. Face protection shield. Eye/face protection

Skin and body protection Boots. Overalls. Impervious clothing. Long sleeved clothing.

Hand protection Elbow-length impervious gloves.

**Respiratory protection** If determined by a risk assessment an inhalation risk exists, wear a suitable mist 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** Liquid

**Appearance** No information available Colourless to Slightly Yellow Color

Odor Characteristic

Odor threshold No information available

Remarks • Method **Property** Values pН <2 None known

pH (as aqueous solution) No data available None known Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point Not applicable None known No data available **Evaporation rate** None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive limits

Vapor pressure No data available None known Vapor density No data available None known

No data available

No data available Relative density None known Miscible in water None known Water solubility None known Solubility(ies) No data available **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** Reacts with metals.

**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 Corrosive to metals.

**Conditions to avoid** 

Conditions to avoid Heat.

Incompatible materials

Incompatible materials Strong alkalis. Metals.

**Hazardous decomposition products** 

Hazardous decomposition products Carbon oxides. Oxides of sulfur.

# 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** Irritating to respiratory system.

**Eye contact** Causes serious eye damage.

**Skin contact** Contact causes severe skin irritation and possible burns.

**Ingestion** Can burn mouth, throat, and stomach.

**Symptoms** 

Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness).

Burning. Coughing and/ or wheezing. Difficulty in breathing.

#### Numerical measures of toxicity - Product Information

Refer to component information below.

**Component Information** 

_				
	Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methane sulfonic acid 649 mg/kg (rat)		-	-	
	L(+)-Lactic Acid	L(+)-Lactic Acid 3543 mg/kg bodyweight (EPA		> 7.94 mg/l/4h (OECD 403
		OPP 81-1 method)	OPP 81-2 method)	method)
Г	Formic acid	= 1100 mg/kg (Rat)	-	= 15 g/m³ (Rat) 15 min

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 May cause respiratory irritation. Classification is based on mixture calculation methods

based on component data.

**STOT - repeated exposure** No information available.

Aspiration hazard No information available.

# 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

**Ecotoxicity** Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methane sulfonic acid	EC50: =12-24mg/L (72h, Selenastrum capricornutum)	LC50: =73mg/L (96h, Oncorhynchus mykiss)	-	-
L(+)-Lactic Acid	EC50: =3.5mg/L (70h, Pseudokirchneriella subcapitata)	LC50: =320mg/L (96h, Brachydanio rerio) LC50: 100 - 180mg/L (96h, Lepomis macrochirus) LC50: 100 - 180mg/L (96h, Oncorhynchus mykiss)	-	EC50: =240mg/L (48h, Daphnia magna) EC50: 180 - 320mg/L (48h, Daphnia magna)

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Formic acid	EC50: =25mg/L (96h,	LC50: =175mg/L (24h,	-	EC50: =120mg/L (48h,
	Desmodesmus	Lepomis macrochirus)		Daphnia magna) EC50:
	subspicatus) EC50:			138 - 165.6mg/L (48h,
	=26.9mg/L (72h,			Daphnia magna)
	Desmodesmus			,
	subspicatus)			

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

**Component Information** 

	Chemical name	Partition coefficient
	L(+)-Lactic Acid	-0.62
	Formic acid	-0.54

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 Empty containers should be taken to an approved waste handling site for recycling or

disposal.

# 14. TRANSPORT INFORMATION

**ADG** 

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and

Rail; DANGEROUS GOODS.

UN number 3265

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS METHANE SULPHONIC

ACID)

Hazard class 8
Packing group II
Hazchem code 2X

<u>IATA</u>

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 METHANE SULPHONIC

ACID)

Transport hazard class(es) 8
Packing group | |

#### **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 METHANE SULPHONIC

ACID)

Transport hazard class(es)

Packing group

IMDG EMS Fire

F-A

IMDG EMS Spill

S-B

Marine pollutant

No

# 15. REGULATORY INFORMATION

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

### **National regulations**

#### <u>Australia</u>

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

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule (SUSMP) 5

#### National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Formic acid - 64-18-6	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

All the constituents of this material are listed on the Australian Inventory of Industrial

Chemicals.

#### 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

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 lxom representative or lxom 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**