SAFETY DATA SHEET



Revision date: 10-Mar-2023

Revision Number 4

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name AMINO TRIMETHYLENE PHOSPHONIC ACID (ATMP)

Product Code(s) 000000018248

Other means of identification

UN number 3265

Synonyms ATMP 50%

Recommended use of the chemical and restrictions on use

Recommended use Scale inhibitor and corrosion inhibitor in cooling water, boiler water and oilfield water

treatment.

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 C
Serious eye damage/eye irritation	Category 1

SIGNAL WORD

Danger

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Label elements

Corrosion



Hazard statements

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

Precautionary Statements - Prevention

Keep only in original container

Do not breathe mist, vapours, spray.

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

Immediately call a POISON CENTER or doctor/physician

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

Absorb spillage to prevent material damage

Precautionary Statements - Storage

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

General Hazards

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Chemical name	CAS No.	Weight-%
Amino trimethylene phosphonic acid	6419-19-8	48-52
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.

Inhalation Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is

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irregular or stopped, administer artificial respiration. Seek immediate medical

attention/advice.

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. Erythema (skin redness).

Burning.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. Symptoms may be delayed. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable extinguishing media High volume water jet.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

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

Non-combustible, substance itself does not burn but may decompose upon heating to

produce corrosive and/or toxic fumes.

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 Avoid contact with skin, eyes, and clothing. Do not breathe vapor or mist. Evacuate

personnel to safe areas. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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

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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 containment 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. Pick up and transfer to properly labelled containers.

Use personal protective equipment as required. For large amounts, pump off product.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes, and clothing. Do not breathe vapor or mist. Ensure adequate

ventilation. Use personal protection equipment. Wash thoroughly after handling. Handle in

accordance with good industrial hygiene and safety practice.

General hygiene considerations Take off contaminated clothing and wash 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 dry, cool and well-ventilated place. Store away from

foodstuffs. Keep container closed when not in use.

Incompatible materials Alkalis. Sodium. Calcium. Alkali metals. Halogens. Metal oxides. Non-metal oxides. Acyl

halides. Metal phosphides.

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.

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

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.

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

Skin and body protection Wear suitable protective clothing. Overalls. Boots.

Elbow-length impervious gloves. Hand protection

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** Clear Color Colourless Odor Odourless

Odor threshold No information available

Property Values Remarks • Method

pН 2 max None known pH (as aqueous solution) No data available None known No data available Melting point / freezing point 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 Not applicable

limits

Lower flammability or explosive Not applicable

limits

No data available Vapor pressure None known No data available Vapor density None known Relative density >=1.3 None known Water solubility Miscible in water None known None known Solubility(ies) No data available **Partition coefficient** No data available None known **Autoignition temperature** Not applicable None known No data available **Decomposition temperature** None known Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

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Reactivity Reacts with incompatible materials shown below.

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 Contact with metals may evolve flammable hydrogen gas.

Conditions to avoid

Conditions to avoid Do not contaminate food or feed stuffs.

Incompatible materials

Incompatible materials Alkalis. Sodium. Calcium. Alkali metals. Halogens. Metal oxides. Non-metal oxides. Acyl

halides. Metal phosphides.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides. Phosphorus oxides. Phosphine.

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 damage.

Skin contact Causes burns.

Ingestion Can burn mouth, throat, and stomach.

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

Burning.

Numerical measures of toxicity - Product Information

Refer to component information below.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Amino trimethylene phosphonic	= 2100 mg/kg (Rat)	> 6310 mg/kg (Rabbit)	-
acid			

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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.

Serious eye damage/eye irritation Causes serious eye damage.

No information available. Respiratory or skin sensitization

Germ cell mutagenicity No information available.

Carcinogenicity Not listed as carcinogenic according to IARC.

(IARC - International Agency for Research on Cancer).

Reproductive toxicity No information available.

No information available. STOT - single exposure

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	Crustacea
			microorganisms	
Amino trimethylene	EC50: =19.6mg/L (96h,	LC50: =8132mg/L (96h,	-	EC50: =297mg/L (48h,
phosphonic acid	Pseudokirchneriella	Pimephales promelas)		Daphnia magna)
	subcapitata)	LC50: =330mg/L (96h,		
		Lepomis macrochirus)		

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient	
Amino trimethylene phosphonic acid	-3.53	

Mobility

Mobility in soil No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

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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

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

PHOSPHONIC ACID)

Hazard class 8 Ш Packing group 2X Hazchem code

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

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS AMINOTRIMETHYLENE **UN proper shipping name**

PHOSPHONIC ACID)

Transport hazard class(es) 8 Packing group Ш

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 AMINOTRIMETHYLENE

PHOSPHONIC ACID)

Transport hazard class(es) Packing group Ш **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

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).

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See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) None allocated

International Inventories

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

Chemicals.

NZIOC All the constituents of this material are listed on the New Zealand Inventory of Chemicals.

Legend:

AllC- Australian Inventory of Industrial Chemicals NZIoC - New Zealand Inventory of 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 08/2022

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Change in Formulation

Change to Transport Information

Change to Packing Group

Issuing Date: 10-Mar-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)

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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