



Safety Data Sheet

Section 01 - Identification

Product Identifier	ClearMem 2500
Other Means of Identification	None
Product Use and Restrictions on Use	Cleaning/washing agents, disinfectants, complexing agents, scale inhibition.
Initial Supplier Identifier	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
Prepared By	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
24-Hour Emergency Phone	Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification

Skin Corrosion/Irritation	Category 1A
Serious Eye Damage/Irritation	Category 1

Physical Hazards

Corrosive to Metals	Category 1
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Danger

Hazards Statements

H314 – Causes severe skin burns and eye damage.
H290 – May be corrosive to metals.

Pictograms



Precautionary Statements

P234 – Keep only in original container.
P260 – Do not breathe mist, vapours or spray.
P280 – Wear protective gloves, protective clothing, eye protection, and face protection.
P301 + P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin.
P363 – Wash contaminated clothing before reuse.
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 – Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P390 – Absorb spillage to prevent material damage.

P405 – Store locked up.

P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Aminotri (methylenephosphonic acid)	6419-19-8	>50%	
Phosphorus Acid	13598-36-2	4.5%	

Section 04 - First Aid Measures

Inhalation	If symptoms are experienced, remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.
Skin Contact / Absorption	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water. Seek medical attention if irritation occurs or persists. Completely decontaminate clothing, shoes and leather goods before reuse or discard.
Eye Contact	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 30 minutes or until the chemical is removed, while holding the eyelid(s) open to ensure complete irrigation of the eye tissue. Seek immediate medical attention.
Ingestion	Immediate first aid is not likely to be required if small amounts are ingested. If larger amounts are ingested, do not induce vomiting. If conscious and alert, have victim rinse mouth with water and drink 2-4 cups of water. Seek medical attention.
Additional Information	Not Available

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media	Carbon dioxide, dry chemical powder, alcohol foam, polymer foam, water spray, or fog.
Unsuitable Extinguishing Media	Not Available
Specific Hazards Arising From the Chemical	Thermal decomposition products include nitrogen oxides, phosphorous oxides and phosphine.
Special Protective Equipment and Precautions for Fire-Fighters	Wear NIOSH-approved self-contained breathing apparatus and protective equipment.
Further Information	Not Available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.
Environmental Precautions	Prevent material from entering sewers or confined spaces.
Methods and Materials for Containment and Cleaning Up	Do not touch spilled material. Contain spilled solutions with earth, sand or absorbent material which does not react with spilled material.

Section 07 - Handling and Storage

Precautions for Safe Handling	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Conditions for Safe Storage	Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Keep storage area separate from work areas.
Incompatibilities	Strong oxidizing agents, strong bases.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Aminotri (methylenephosphonic acid)	WEELs®	WEEL-TWA	10mg/m ³

Engineering Control(s)

Ventilation Requirements	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other	Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is being handled. Contact lenses should not be worn as they may contribute to severe eye injury.
Hand Protection	Impervious gloves of chemically resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
Skin and Body Protection	Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
Respiratory Protection	Respiratory protection likely not needed. However, care should be taken to avoid breathing excess vapour or mist. Use approved respiratory protection equipment when airborne exposure is excessive.
Thermal Hazards	Not Available

Section 09 - Physical and Chemical Properties

Appearance

Physical State	Liquid
Colour	Colourless to light yellow
Odour	Not Available
Odour Threshold	Not Available

Property

pH	~2
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Melting Point/Freezing Point	-10°C
Initial Boiling Point and Boiling Range	Decomposes
Flash Point	Not Applicable
Evaporation Rate	Less than 1
Flammability	Non-flammable
Upper Flammable Limit	Not Applicable
Lower Flammable Limit	Not Applicable
Vapour Pressure (mm Hg, 20°C)	Not Available
Vapour Density (Air=1)	Not Available
Relative Density	1.3 @ 20°C
Solubility(ies)	Soluble in water. Soluble in 50% methanol, ethylene glycol; very soluble in methanol.
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	Not Applicable
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	Not Available
Specific Gravity (Water=1)	1.28-1.38
% Volatiles by Volume	Not Available
Formula	C ₃ H ₁₂ NO ₉ P ₃
Molecular Weight	299.05

Section 10 - Stability and Reactivity

Reactivity	Not Available
Stability	Normally stable. Decomposes at approximately 215°C.
Possibility of Hazardous Reactions	Polymerization will not occur.
Conditions to Avoid	Temperatures above 215°C
Incompatible Materials	Strong oxidizing agents, bases.
Hazardous Decomposition Products	None reported.

Section 11 - Toxicological Information

Acute Toxicity Estimate

Component	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
ClearMem 2500	4200-4800 mg/kg (rat)	>30,000 mg/kg (rabbit)	Not Available

This product has been classified in accordance with the Hazardous Products Regulations using ATE formula documented in the GHS standard.

Chronic Toxicity – Carcinogenicity

Component	IARC
ClearMem 2500	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

Skin Corrosion/Irritation	Corrosive. Capable of producing burns, blisters, ulcers and permanent scarring.
Ingestion	May be harmful if swallowed in large amounts. Can cause burns to the mouth, tongue, esophagus and stomach.
Inhalation	May cause respiratory tract irritation if inhaled.
Serious Eye Damage/Irritation	Corrosive. May cause burns and irritation to eyes, which may result in permanent injury.
Respiratory or Skin Sensitization	Not Available
Germ Cell Mutagenicity	Not Available
Reproductive Toxicity	Not Available
STOT-Single Exposure	Not Available
STOT-Repeated Exposure	No chronic effects expected.
Aspiration Hazard	Not Available
Synergistic Materials	Not Available

Section 12 – Ecological Information

Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Aminotri (methylenephosphonic acid)	Not Available		
Biodegradability	Not Available		
Bioaccumulation	Product is not expected to bioaccumulate.		
Mobility	Not Available		
Other Adverse Effects	Hazardous to the environment. Minimize/prevent product from coming into contact with soils or plants. This product should not be dumped, spilled, rinsed, or washed into sewers or public waterways.		

Section 13 – Disposal Considerations

Waste From Residues/Unused Products	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
Contaminated Packaging	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 – Transport Information

UN Number	UN3265	
UN Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Aminotri (methylenephosphonic acid))	
Transport Hazard Class(es)	8	
Packaging Group	II	
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.	
Special Precautions	Not Available	
Transport in Bulk	Not Available	
Additional Information	<u>Packing Group</u>	<u>Limited Quantity Index</u>
	I	0
	II	1 L
	III	5 L

TDG

Other Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 – Other Information

Preparation Date October 19, 2015

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution[®] initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA

ClearTech Industries Inc. - Locations

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