

SAFETY DATA SHEET

TM DESCALER

SECTION 1- PRODUCT IDENTIFICATION

PRODUCT NAME : TM DESCALER
SYNONYMS : Product is a mixture: No synonyms are available.
PRODUCT USE : Moderately Alkaline Material
SUPPLIER : CLEANING SYSTEMS LTD
SUPPLIER'S ADDRESS : 659 Great South Rd, Penrose, Auckland NZ 1642
0800100117 or admin@cleaningsystems.co.nz
www.cleaningsystems.co.nz
EMERGENCY RESPONSE PHONE NUMBER : 0800764766 or 111

SECTION 2 – HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

HSNO CLASSIFICATION : 6.1E (All), 6.1E (O), 6.3A , 6.4A, 6.1D (All), 6.1D (O) , 9.3C HSNO Approval HSR003668
GHS U.S. – CLASSIFICATION : H302 Harmful if swallowed.
H315 Causes skin irritation
H319 Causes serious eye irritation

LABEL ELEMENTS : **GHS – US HAZARD PICTOGRAMS** The product is classified and labeled according to the Globally Harmonized System (GHS).

HAZARD PICTOGRAMS :



SIGNAL WORD : WARNING

HAZARD STATEMENTS (GHS-US) : H302 Harmful if swallowed.
: H315 Causes skin irritation.
: H319 Causes serious eye irritation.

PRECAUTIONARY STATEMENTS (GHS-US) : P101 If medical advice is needed, have product container or label at hand.
: P102 Keep out of reach of children.
: P103 Read label before use.
: P264 Wash skin and contaminated clothing thoroughly after handling.
: P270 Do not eat, drink or smoke when using this product.
: P280 Wear suitable protective gloves/protective clothing/eye protection/face protection.
: P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
: P302+P352 : IF ON SKIN: Wash with plenty of soap and water.
: P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
: P332+P313 If skin irritation occurs: Get medical advice/attention.
: P337+P313 If eye irritation persists: Get medical advice/attention.
: P501 Dispose of contents/container in accordance with local/regional/national/international regulations

CLASSIFICATION SYSTEM : NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.
NFPA RATINGS (SCALE 0-4) : Health = 2, Fire = 0, Reactivity = 0

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HMIS RATINGS (SCALE 0-5) : Health = 2, Fire = 0, Reactivity = 0

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERISTIC : Mixtures
DESCRIPTION : Mixture of the substances listed below with nonhazardous additions.

COMPONENT	PERCENT	CAS #	EC #	GHS CLASS
Aminotrimethylene Phosphonic Acid	1-5	6419-19-8	229-146-5	Metal Corr Cat 1, Eye Irrit Cat 2
Sodium Hydroxide	1-5	1310-73-2	215-185-5	Metal Corr Cat 1, Skin Corr. Cat. 1A Eye Dam. Cat. 1, Aquatic Acute Cat 3
Ethylenediamine Tetraacetate Na salt	1-5	64-02-8	200-573-9	Skin Irrit Cat 2, Eye Dam Cat 2A

Note: The sodium hydroxide is neutralized by the acidity of the Aminotrimethylene Phosphonic Acid to non-hazardous pH levels. Irrit = Irritation, Cor = Corrosive, Dam = Damage, Cat = Category, Tox = Toxic, STOT = Specific Target Organ Toxicity.

SECTION 4 – FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. Show the label where possible.

EYE CONTACT : Immediately flush eyes with water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Remove contact lenses, if present and easy to do so. Continue rinsing. If irritation persists, get immediate medical attention.

SKIN CONTACT : Remove contaminated clothing and shoes. Wash affected skin area with soap and water. If irritation persists, get immediate medical attention.

SWALLOWING (INGESTION) : If ingested, dilute swallowed material by drinking water. DO NOT INDUCE VOMITING. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious person. Get immediate medical attention.

INHALATION : Remove to fresh air. Get immediate medical attention.

OTHER INSTRUCTIONS : Rescue personnel must wear appropriate protective equipment during removal of victims from contaminated areas. Treat symptomatically and supportively.

SECTION 5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Dry chemical, foam, water or carbon dioxide.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS : In the event of a fire, wear a NIOSH (USA) or CEN (EU) approved, positive pressure, self-contained breathing apparatus (SCUBA) and full protective clothing. Evacuate all non-essential personnel from the danger area.

UNUSUAL FIRE AND EXPLOSION HAZARDS : No further relevant information is available.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES : Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.

ENVIRONMENTAL PROCEDURES : Keep spilled material away from sewage/drainage systems and waterways.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP : All clean-up personnel must be properly trained. Confine the spill and remove incompatible materials and ignition sources. Ensure adequate ventilation. Secure the

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source of the leak if conditions are safe. Neutralize spill and collect using an appropriate absorbent material such as clay or vermiculite. Place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

SECTION 7 – HANDLING AND STORAGE

- PRECAUTIONS FOR SAFE HANDLING** : Use with adequate ventilation. Wear proper protective equipment. Do not mix with water or acids without proper dilution and agitation to prevent a potentially violent reaction.
- CONDITIONS FOR SAFE STORAGE** : Store in closed, properly labeled containers. Protect containers from heat, physical damage, ignition sources and incompatible materials. Have emergency equipment for fires and spills readily available.



SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

- TLV (THRESHOLD LIMIT VALUE)** : The TLV in section III is the ACGIH/TLV-TWA (threshold limit value/time weighted average concentration for an eight hour work day). The STEL is the short term exposure limit and the (Ceil) is the ceiling limit.

COMPONENT	OSHA PEL – TWA	ACGIH – TLV	ACGIH – STEL
Aminotrimethylene Phosphonic Acid	Not Established	Not Established	Not Established
Sodium Hydroxide	2 mg/m ³ (Ceiling)	2mg/m ³	2mg/m ³ (Ceiling)
Ethylenediamine Tetraacetate	Not Established	Not Established	Not Established

- EYE PROTECTION** : Wear chemical splash goggles or face shield.
- SKIN PROTECTION** : Minimize contact with product. Wear chemical resistant coveralls, boots, gloves, apron and/or suitable long-sleeved clothing.
- RESPIRATORY PROTECTION** : In case of brief exposure use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.
- VENTILATION** : Ensure adequate ventilation.
- ADDITIONAL MEASURES** : Emergency eyewash and safety shower facilities should be available in the immediate work area.
- REQUIRED WORK/HYGIENE** : Wash hands thoroughly after handling. Keep away from all food stuffs, beverages and feed. Do not eat, drink or smoke in work area.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE** : Clear liquid with mild to no odor.
- ODOR** : Mild odor
- ODOR THRESHOLD** : Not available
- PH** : 7.0 - 8.0 AS IS
- MELTING POINT/FREEZING POINT** : Not available
- BOILING POINT** : Approx. 212° F.
- FLASH POINT** : Non flammable, non combustible
- EVAPORATION RATE** : Not available
- FLAMMABILITY** : Non flammable-Non combustible
- LOWER FLAMMABILITY LIMIT** : Not available

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UPPER FLAMMABILITY LIMIT : Not available
VAPOR PRESSURE : Not available
VAPOR DENSITY (AIR=1) : Not available
RELATIVE DENSITY : 1.14
SOLUBILITY IN WATER : Soluble in water
PARTITION COEFFICIENT n-
OCTANOL/WATER : Not available
AUTOIGNITION TEMPERATURE : Not available
DECOMPOSITION
TEMPERATURE : Not available

SECTION 10 – STABILITY AND REACTIVITY

STABILITY : Stable under recommended storage conditions.
HAZARDOUS CONDITIONS TO AVOID : No decomposition if used according to specifications
INCOMPATIBLE MATERIALS : Keep away from strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS : No dangerous decomposition products known.

SECTION 11 – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION : **Aminotrimethylene Phosphonic acid (ATMP)**
ACUTE TOXICITY : LD50 Oral (Rat): 2910mg/kg, LD50 Dermal (Rabbit): > 6310mg/kg.
CHRONIC EFFECTS ON HUMANS : Rat 24months: > 500 mg/kg. Conclusion: Practically non toxic.
OTHER TOXIC EFFECTS ON HUMANS : Skin and Eyes (Rabbit): Moderate Irritant.

TOXICOLOGICAL INFORMATION : **Sodium Hydroxide**
ACUTE TOXICITY : Draize test, rabbit, eye: 400 ug Mild;
Draize test, rabbit, eye: 1% Severe;
Draize test, rabbit, eye: 50 ug/24H Severe;
Draize test, rabbit, eye: 1 mg/24H Severe;
Draize test, rabbit, skin: 500 mg/24H Severe

EYE CONTACT : Causes severe eye damage.
SKIN CONTACT : Causes skin burns. Onset of symptoms may be delayed following exposure.
INHALATION : Corrosive to respiratory tract.
INGESTION : Corrosive to respiratory tract.
CARCINOGENICITY : The components of this product are not classified as carcinogenic by OSHA, NTP IARC or CA Prop 65

TOXICOLOGICAL INFORMATION : **Ethylenediamine Tetraacetate**
ACUTE TOXICITY : LD50 Oral (rat): 630 - 1,260 mg/kg,
INHALATION LC50 : No data available
DERMAL LD50 : No data available
OTHER INFORMATION ON ACUTE TOXICITY : No data available

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION : **Aminotrimethylene Phosphonic Acid (ATMP)**
ECOTOXICITY : Acute LC50 fish (fresh water)14 days: 160mg/L, LC50 Daphnia-Daphnia Magna (fresh water) 48hr: 297 mg/L, LC50 Daphnia (marine water) 48hr: 94mg/L

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CHRONIC TOXICITY	:	Fish (fresh water) 60 days @ 23mg/L: No observable effect. Daphnia (fresh water) 28 days @ >25mg/L: No observable effect
BIODEGRADATION	:	Biodegradable.
TOXICITY OF PRODUCTS OF BIODEGRADATION	:	The product and products of biodegradation are not toxic.
ECOLOGICAL INFORMATION	:	Sodium Hydroxide
ECOTOXICITY	:	Immobilization EC50/48h/Daphnia-40.38 mg/l. LC50 /96h/Mosquito fish-125 mg/l.
ENVIRONMENTAL	:	No information found.
PHYSICAL	:	No information found.
OTHER	:	No relevant information available.
PERSISTENCE AND DEGRADABILITY	:	No relevant information available.
BIOACCUMULATIVE POTENTIAL	:	No relevant information available.
NOTES	:	Water hazard class 1 (Self assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of this product to reach ground water, water course or sewage system. Must no reach bodies of water or drainage ditch undiluted or un-neutralized. Rinse off larger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms.
ECOLOGICAL INFORMATION	:	Ethylenediamine Tetraacetate
ECOTOXICITY	:	No data available.
PERSISTENCE AND DEGRADABILITY	:	No data available.
BIOACCUMULATIVE POTENTIAL	:	No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL	:	This product must be disposed of in accordance with Federal, state and local environmental regulations. Discarded materials may be considered hazardous waste due to pH/corrosivity. It is the responsibility of the product user to determine at the time of disposal whether a material containing, or derived from this product, should be classified as a hazardous waste.
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SECTION 14 – TRANSPORTATION INFORMATION

DOT/IMDG/ IATA PROPER SHIPPING NAME	:	Not Hazardous
HAZARD CLASS AND LABEL	:	Not Applicable.
UN NUMBER	:	Not Applicable.
PACKAGING GROUP	:	Not Applicable.
EPA REPORTABLE QUANTITY (RQ)	:	Not Applicable.
MARINE POLLUTANT	:	Not listed.
EMERGENCY RESPONSE GUIDE	:	Not Applicable.

SECTION 15 – REGULATORY INFORMATION

U.N. GHS CLASSIFICATION & LABELING INFORMATION: See Section 2 for GHS Hazard Information.

U.S. FEDERAL REGULATORY INFORMATION:

LISTED CARCINOGEN	:	Not listed.
TSCA STATUS	:	The ingredients of this product are listed in TSCA inventory (40CFR 710.)

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- SARA SECTION 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA SECTION 312** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 312.
- SARA SECTION 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
- NFPA HEALTH** : 2
- NFPA FLAMMABILITY** : 0
- NFPA REACTIVITY** : 0

EUROPEAN UNION REGULATORY INFORMATION:

- EC CLASSIFICATION** : Xi: Irritant
- DSD/DPD RISK (R) PHRASES** : R22: Harmful if swallowed.
R36/38: Irritating to eyes and skin.
- DSD/DPD SAFETY (S) PHRASES** : S1/2: Keep locked up and out of reach of children.
S24/25: Avoid contact with eyes and skin.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/S37/39: Wear suitable protective clothing, gloves and eye/face protection.
S45: In case of accidents or if you feel unwell, seek medical advice immediately. Show label where possible.
S61: Avoid release to the environment.
S62: If swallowed, do not induce vomiting.
S64: If swallowed, rinse mouth with water if victim is conscious.
- DSD/DPD HAZARD SYMBOL** : Xi: Irritant



CANADIAN REGULATORY INFORMATION:

- WHMIS CATEGORY** : D2B: Materials that cause other toxic effects (TOXIC).



- DOMESTIC SUBSTANCES LIST (DSL)** : Listed
- INGREDIENT DISCLOSURE LIST** : Listed

SECTION 16 – OTHER INFORMATION

- DISCLAIMER** : The information contained herein has been compiled from sources believed to be reliable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Hydramaster Corp. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and recommendations in the specific context of their intended use.

- CERCLA** : Comprehensive Environmental Response, Compensation, and Liability Act.
- EINECS** : European Inventory of Existing Commercial Chemical Substances
- IMDG** : International Maritime Code for Dangerous Goods
- IARC** : International Agency for Research on Cancer

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IATA	: International Air Transportation Association
ACGIH	: American Conference of Governmental Industrial Hygienists
NFPA	: National Fire Protection Association (USA)
NTP	: National Toxicology Program
SARA	: Superfund Amendments and Reauthorization Act
TSCA	: Toxic Substances Control Act
HMIS	: Hazardous Materials Identification System (USA)
WHMIS	: Workplace Hazardous Materials Information System
LC50	: Lethal concentration, 50 percent
LD50	: Lethal dose, 50 percent
STOT	: Systemic Target Organ Toxicity
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