



CLEARWATER
Engineered Chemistry

Material Safety Data Sheet
NA-MINUS®

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0
PERSONAL PROTECTION	G

24 hr. Emergency Contact (CHEMTREC) US Tel: 1- 800 - 424-9300 - Int'l. Tel. 703 - 527 - 3887

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER: CLEARWATER INTERNATIONAL L.L.C.
515 POST OAK BLVD., SUITE 600
HOUSTON, TX 77027

MANUFACTURER: CLEARWATER INTERNATIONAL L.L.C.
100 INDUSTRIAL DRIVE
LEETSDALE, PA 15056

PRODUCT NAME: NA-MINUS®
PRODUCT CODE: WAT7605A
PRODUCT USE/CLASS: Salt Inhibitor

MSDS REVISION DATE: 03/01/04

PREPARER: MJW

PHONE: 724-318-1050

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	EXPOSURE LIMITS	CAS#	% BY WEIGHT
METHYL ALCOHOL	ACGIH TLV – 200ppm TWA, 250ppm STEL OSHA PEL – 200ppm TWA	67-56-1	7-13%
ETHYLENE GLYCOL	ACGIH TLV – 50 ppm STEL OSHA PEL – 50 ppm CEILING	107-21-1	3-7%

3. HAZARD IDENTIFICATION

EYE: Liquid, aerosols and vapors of this product may be irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

SKIN: May cause skin irritation. Allergic reactions are possible.

INGESTION: This material may be harmful or fatal if swallowed. Ingestion of small amounts may cause blindness.

INHALATION: May be harmful or fatal if inhaled in large amounts. May be irritating to mucous membranes and lung tissue.

CHRONIC INFORMATION: Overexposure may cause nervous system damage. Overexposure may cause kidney damage. May cause liver disorder (e.g., edema, proteinuria) and damage.

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Ingestion, and Eye contact.

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention, if irritation persists.

SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

INHALATION: Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

INGESTION: If swallowed induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Contact a poison control center or medical personnel immediately. Guard against aspiration into lungs.

5. FIRE FIGHTING MEASURES

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FLASH POINT: 113.7 F
N.D. (TAGLIABUE CLOSED CUP)

LOWER EXPLOSIVE LIMIT:
UPPER EXPLOSIVE LIMIT: N.D.

AUTOIGNITION TEMPERATURE: N.D.

EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL

UNUSUAL FIRE AND EXPLOSION HAZARDS: Can release vapors that form explosive mixtures at temperatures at or above the flashpoint. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; They may explode and cause injury or death.

SPECIAL FIRE FIGHTING PROCEDURES: Containers can build up pressure if exposed to heat (fire). As in any fire, wear a self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Apply alcohol-type foam or all purpose foam manufacturers recommended techniques for large fires. Use carbon dioxide or dry chemical for small fires. Use water spray to keep containers cool.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Extinguish any possible ignition source until the area is determined to be free from fire or explosion hazard. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. (See exposure controls / personal protection section) Spilled material should be disposed of according to applicable regulations.

7. HANDLING AND STORAGE

HANDLING: Handle all chemicals with care. Ground and bond containers when transferring materials.

STORAGE: Keep away from heat, sparks, and flames. Keep container closed when not in use. Store in a cool, dry, well ventilated place away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their exposure limits.

RESPIRATORY PROTECTION: Use a NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge when airborne concentrations are expected to exceed exposure limits. Protection by air purifying respirators is limited.

SKIN PROTECTION: When contact is likely wear chemical resistant gloves and boots.

EYE PROTECTION: Wear safety glasses with side shields or goggles.

OTHER PROTECTIVE EQUIPMENT: Emergency eye wash stations and defuge showers should be available in the work area.

HYGIENIC PRACTICES: Wash hands before eating. Use only with adequate ventilation. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Pale yellow

ODOR: Sl. alcohol

BOILING POINT (RANGE): 147-387 F

FREEZE POINT: N.D.

VAPOR DENSITY: N.D.

VAPOR PRESSURE: N.D.

PHYSICAL STATE: Liquid

SOLUBILITY IN WATER: Complete

PH (AS IS): 3-5

SPECIFIC GRAVITY: 1.0700

10. STABILITY AND REACTIVITY DATA

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CONDITIONS TO AVOID: Avoid temperature extremes. Excessive heat causes the vapor pressure to increase rapidly.

INCOMPATIBILITY: Reacts violently with oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, sulfur, and nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur under normal use and storage conditions.

CHEMICAL STABILITY: This product is stable under normal storage conditions.

11. TOXICOLOGICAL INFORMATION

ORAL: No product information is available.

DERMAL: No product information is available.

INHALATION: No product information is available.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: No product information is available.

CHEMICAL FATE INFORMATION: No product information is available.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Consult local, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations. Disposal in streams or sewers may be prohibited by federal, state, and local regulations.

RCRA STATUS: D001 -Characteristic of ignitability

14. TRANSPORTATION INFORMATION

(NON-BULK SHIPMENTS)

D.O.T. PROPER SHIPPING NAME: Not Regulated

D.O.T. TECHNICAL NAME: Non-hazardous for D.O.T. purposes

D.O.T. HAZARD CLASS: N/A

HAZARD SUBCLASS: N/A

D.O.T. UN NUMBER: N/A

PACKING GROUP: N/A

RESP. GUIDE PAGE: N/A

(BULK SHIPMENTS)

D.O.T. PROPER SHIPPING NAME: Combustible Liquid, N.O.S.

D.O.T. TECHNICAL NAME: (Methanol)

D.O.T. HAZARD CLASS: 3

HAZARD SUBCLASS: N/A

D.O.T. UN NUMBER: NA1993

PACKING GROUP: III

RESP. GUIDE PAGE: 128

T.D.G. PROPER SHIPPING NAME: Flammable Liquid, Toxic, N.O.S.

T.D.G. TECHNICAL NAME: (Methanol)

T.D.G. HAZARD CLASS: 3

HAZARD SUBCLASS: 6.1

T.D.G. UN NUMBER: UN1992

PACKING GROUP: III

RESP. GUIDE PAGE: 131

IMDG PROPER SHIPPING NAME: Flammable Liquid, Toxic, N.O.S.

IMDG TECHNICAL NAME: (Methanol)

IMDG HAZARD CLASS: 3

HAZARD SUBCLASS: 6.1

IMDG UN NUMBER: UN1992

PACKING GROUP: III

EmS No.: F-E, S-D

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15. REGULATORY INFORMATION

CERCLA – SARA HAZARD CATEGORY:

SECTION 311/312: This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD CHRONIC HEALTH HAZARD FIRE HAZARD

SARA SECTION 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

COMPONENT	CAS#	% BY WEIGHT
Methyl Alcohol	67-56-1	7-13%
Ethylene Glycol	107-21-1	3-7 %

TSCA STATUS:

All components of this product are listed on the Toxic Substance Control Act Inventory or are excluded from the listing requirements.

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: B-2, D-1B

CANADIAN ENVIRONMENTAL PROTECTION ACT:

All components of this product are listed on the Canadian Domestic Substance List (DSL).

16. OTHER INFORMATION

HMIS RATING – HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 0 PERSONAL PROTECTIVE RATING: G

LEGEND: N.A. – NOT APPLICABLE, N.E. - NOT ESTABLISHED, N.D. – NOT DETERMINED

THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN

IS BASED ON DATA AVAILABLE TO US, AND IS BELIEVED TO BE ACCURATE, ALTHOUGH NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY IN THIS RESPECT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS.