

HOAT-10X
Extended Life/Universal Antifreeze Add Pak
Precharged, High-Nitrite

Additives Plus
P.O. Box 1119
Evergreen, CO 80437
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MSDS No: 101678
Ver. No: 1
Ver. Date: 02/10/06

24-HOUR EMERGENCY NUMBERS:
PERS 1-800-633-8253
INT'L PERS 1-801-629-0667
CUSTOMER SERVICE:
303-292-0595

National Fire Protection Association

| | |
|----------|---------------------|
| 1 | Health |
| 0 | Flammability |
| 0 | Reactivity |
| | Special |

WHMIS: Not Applicable

Protective Equipment:



SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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| Product Name: | HOAT-10X |
| Product Description: | Extended Life/Universal Add Pak, Precharged |
| Chemical Name: | Mixture |
| Chemical Family: | Alkaline aqueous solution of inorganic and organic corrosion inhibitors. |
| Chemical Formula: | Mixture |
| CAS Registry: | Mixture |
| Other Designations: | None |
| General Use: | Inhibitor package for automotive antifreeze or additive package for automotive antifreeze/coolant. |
| Manufacturer: | Additives Plus, P.O. Box 1119, Evergreen, CO 80437, Phone (303) 292-0595 FAX (303) 679-8988 (Hours of operation: Mon-Fri 8:00am-5:00pm MST) 24-hour Emergency Number: PERS 800-633-8253 Customer Service: 303-292-0595 |

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

| <u>MATERIAL</u> | <u>CAS No</u> | <u>% WT</u> | <u>OSHA PEL</u> |
|----------------------------|----------------|-------------|-----------------|
| Deionized Water | 7732-18-5 | Balance | Not applicable |
| Sodium Molybdate Dihydrate | 10102-40-6 | <2% | Not applicable |
| Sodium Nitrite | 7632-00-0 | 10-20% | Not applicable |
| Sodium Benzoate | 532-32-1 | <3% | Not applicable |
| Proprietary Inhibitors | Not applicable | <20% | Not applicable |
| Sodium Tolytriazole | 64665-57-2 | 3-8% | Not applicable |

SECTION 3 – HAZARDOUS IDENTIFICATION

| | | | | | | | | | | | |
|---|---|--|--|--|--|-------------|-------|-------|-------|-------------|---------|
| Health: | 1 | | | | | | | | | | |
| Flammability: | 0 | | | | | | | | | | |
| Reactivity: | 0 | | | | | | | | | | |
| Special: | 0 | | | | | | | | | | |
| 0 = minimal 1= slight 2=moderate 3= serious 4= severe | | | | | | | | | | | |
| <table border="1" style="margin-left: auto; margin-right: 0;"> <tr><td style="text-align: center;">HMIS</td></tr> <tr><td style="text-align: center;">H # 1</td></tr> <tr><td style="text-align: center;">F # 0</td></tr> <tr><td style="text-align: center;">R # 0</td></tr> <tr><td style="text-align: center;">PPE†</td></tr> <tr><td style="text-align: center;">†Sec. 8</td></tr> </table> | | | | | | HMIS | H # 1 | F # 0 | R # 0 | PPE† | †Sec. 8 |
| HMIS | | | | | | | | | | | |
| H # 1 | | | | | | | | | | | |
| F # 0 | | | | | | | | | | | |
| R # 0 | | | | | | | | | | | |
| PPE† | | | | | | | | | | | |
| †Sec. 8 | | | | | | | | | | | |

Route(s) of Entry

| | |
|-----------------------|--|
| Inhalation: | Airborne concentrations of mist or spray may cause damage to the upper respiratory tract and even to lung tissue. Vapor/fumes are not generated at significant levels until temperature is elevated. |
| Skin: | Destructive to tissues contacted and produces severe burns. The severity of damage and extent of irreversibility increases with length of contact time. |
| Ingestion: | Swallowing can cause severe burns and tissue perforation of mucous membranes of the mouth, throat, esophagus and stomach. |
| Eyes: | Destructive to eye tissue on contact. |
| Target Organs: | None known |

Effects of overexposure: Contact with the eyes may damage delicate eye tissue. Ingestion will cause mouth, throat and gastrointestinal irritation. Sodium nitrite can cause cyanosis, headache, dizziness, nausea and methemoglobinemia. Inhalation of harmful levels of vapors is unlikely due to the relatively low vapor pressure and the relatively low concentrations of ingredients.

Effects of overexposure: Acute: None known.
Chronic: None known.

Medical Conditions Generally Aggravated by Long-Term

Exposure: None expected.
Chronic Effects: None known

Carcinogenicity

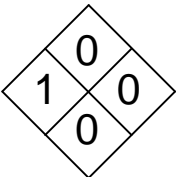
NTP: None known
IARC Monographs: None known
OSHA Regulations: None known
ACGIH None known

SECTION 4 – FIRST AID MEASURES

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| Emergency and First Aid Procedures: | Eye contact: | Flush eyes with large amounts of water for 15 minutes. If irritation persists, get medical attention. |
| | Skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothing, rings, etc. |
| | Ingestion: | Toxic if swallowed. Induce vomiting immediately and seek medical attention. |
| | Inhalation: | Remove to fresh air. If breathing has stopped, start artificial respiration. Seek medical attention. |

Note to Physicians: Treat symptomatically
Special Precautions/Procedures: None known

SECTION 5 – FIRE-FIGHTING MEASURES

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|---|--------------------------------------|---|
| Unusual Fire Fighting procedures: | None required; non-flammable product | NFPA |
| Flash Point: | None detected | |
| Flash Point Method: | Pensky Martens |  |
| Burning Rate: | Does not burn | |
| Auto ignition Temperature: | Not available | |
| Flammable limits in air (% by volume): | Not applicable | |
| LEL: | Not applicable | |
| UEL: | Not applicable | |

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| Flammability Classification: | Not flammable |
| Extinguishing Media: | Water, fog, foam, CO ₂ , dry chemical |
| Unusual Fire or Explosion Hazards: | Closed containers may rupture or explode due to steam pressure build-up when exposed to extreme heat. Water may be used to cool closed containers. |
| Fire-Fighting Instructions: | Do not release runoff from fire control methods to sewers or waterways. |
| Fire-Fighting Equipment: | Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode. |
| Unusual Fire Fighting procedures: | Full protective equipment including self-contained breathing apparatus should be used when Additive Inc. Antifreeze Additive Solution is present during a fire. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Seek medical attention. |

SECTION 6 – ACCIDENTAL RELEASE MEASURES

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| Spill/Leak Procedures: | Recover usable material by convenient method; residual may be removed by wipe or wet mop |
| Small Spills: | Small spills should be absorbed with a suitable inert material (sand, earth, clay, etc.). Remove the absorbed material and place in an appropriate chemical waste container for disposal. |
| Large Spills: | For large spills, dike and pump into suitable containers. Clean up residual water. |
| Containment: | For large spills, dike far ahead of liquid spill for later disposal. |
| Regulatory Requirements: | Follow applicable Federal, State and Local regulations. |

SECTION 7 – HANDLING AND STORAGE

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| Handling Precautions | Wear impermeable gloves and other protective clothing to avoid prolonged or repeated skin contact. When handling, wear eye protection. |
| Storage Requirements: | Keep containers tightly closed when not in use. |

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

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|--------------------------------|---|
| Engineering Controls | |
| Ventilation: | Provide general or local exhaust ventilation systems. |
| Administrative Controls | |
| Respiratory Protection: | If personal exposure cannot be controlled below applicable exposure limits by ventilation, wear respiratory devices approved by NIOSH/MSHA, for protection against organic vapors, dust, fumes and mists. |

Protective Clothing/Equipment: Where skin contact may occur, chemical-impervious gloves should be worn. Use chemical goggles or full face shield when the danger of splashing exists. Rubber apron or similar protective clothing to prevent contact with skin or clothes.



Work and Hygienic Practices: Wash or rinse hands before touching eyes or contact lenses, and before eating.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Avoid contact with skin, eyes and clothing. Do not take internally. Clean up spills immediately. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor: Hazy, light amber liquid
Boiling Point (760 mm Hg): 250-270°F
Specific Gravity (water =1): 1.140-1.189
Vapor Density (air =1): >2.0
Percent Volatile by Volume: NIL
Evaporation Rate (butyl acetate =1): <1
Solubility in Water (% by wt): 100%
Vapor Pressure (at 20°C): 10mm Hg
pH: 9.0-10.0

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable
Polymerization: Will not occur.
Chemical Incompatibilities: Strong oxidizing agents, strong acids.
Conditions to Avoid: Strong oxidizing agents, strong acids.
Hazardous decomposition products: If involved in a fire the following decomposition products may be generated: Carbon dioxide, carbon monoxide, nitrogen oxides, hydrogen cyanide (possible in reducing atmospheres).

SECTION 11 – TOXICOLOGICAL INFORMATION

Eye Effects: Destructive to eye tissue on contact.
Skin Effects: Destructive to tissues contacted and produces severe burns. The severity of damage and extent of irreversibility increases with length of contact time.
Acute Inhalation Effects: Airborne concentrations of mist or spray may cause damage to the upper respiratory tract and even to lung tissue. Vapor/fumes are not generated at significant levels until temperature is elevated.
Acute Oral Effects: Swallowing can cause severe burns and tissue perforation of mucous membranes of the mouth, throat, esophagus and stomach.
Chronic Effects: None known
Carcinogenicity: Neither product nor its ingredients are listed by IARC, NTD or OSHA
Mutagenicity: Not mutagenic
Teratogenicity: Not Teratogenic

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Not determined
Environmental Fate: Decomposes to carbon, oxygen, nitrogen, phosphate salts and water.
Environmental Degradation: Biodegradable
Soil Absorption/Mobility: Not determined

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste disposal method: Sanitary landfill or incinerate in approved facilities in accordance with local, state and federal regulations.
Disposal Regulatory Requirements: Shipments of waste material may be classified as hazardous and subject to manifesting requirements through applicable regulatory agency.
Container Cleaning and Disposal: Containers should be cleaned of residual product before disposal, and disposed of in accordance with all applicable laws and regulations.

SECTION 14 – TRANSPORT INFORMATION

DOT Shipping Name: Non-Hazardous
Shipping Symbols: None
Hazard Class: None
DOT Identification No.: None
Packing Group: None
Label: Non-Hazardous
DOT Class 55

Packaging Authorizations

a) Exceptions: Not applicable
b) Non-bulk Packaging: Not applicable
c) Bulk Packaging: Not applicable

Quantity Limitations

a) Passenger, Aircraft, or Railcar: One liter
b) Cargo Aircraft Only: One liter

Vessel Stowage Requirements

a) Vessel Stowage: Not applicable
b) Other: Not applicable

SECTION 15 – REGULATORY INFORMATION

EPA Regulations

RCRA Hazardous Waste Number and RCRA
Hazardous Waste Classification: Not applicable

CERCLA Hazardous Substance and CERCLA
Reportable Quantity: Not applicable

SARA Toxic Chemical and SARA EHS: Reportable under SARA Title III (40 CFR, Part 370)

OSHA Regulations: Must comply with OSHA standard 29 CFR 1910.1200
(employee right to know)

SECTION 16 – OTHER INFORMATION

Prepared By: Additives Plus

Additional Hazard Rating Systems: None

Disclaimer: THE INFORMATION GIVEN HEREIN IS GIVEN IN GOOD FAITH AND FROM SOURCES WE BELIEVE RELIABLE. BUT NO WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS IS MADE.

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CONSULT ADDITIVES PLUS FOR FURTHER INFORMATION.