SAFETY DATA SHEET

RWT-2000T

Effective Date: December 1, 2014 Replaces Revision: MSDS 06/14/07

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: RWT-2000T
Chemical Name: Corrosion Inhibitor
Chemical Formula: Mixture
Common Name: Not Established
CAS Number: Not Established
Chemical Family: Alkaline Liquid
EPA Registry Number: Not Established
SDS Number: 34
Recommended Use: Locomotive Radiator Water Treatment Chemistry designed to protect locomotive cooling systems against corrosion and scaling, which contains a red dye for visual leak determination.

Supplier
ASAS / TYSOL, Inc.
1561 Woodlane Drive
PO Box 25098
Woodbury, MN 55125 USA

Company Contact: Tom Ewing
Telephone Number: 651-730-4923
FAX: 651-730-5107
E-mail: Tom Ewing, tom@tysol.com
Web: www.tysol.com

Manufacturer
ASAS / TYSOL, Inc.
1561 Woodlane Drive
PO Box 25098
Woodbury, MN 55125 USA

Company Contact: Tom Ewing
Telephone Number: 651-730-4923
FAX: 651-730-5107
E-mail: Tom Ewing, tom@tysol.com
Web: www.tysol.com

24-HOUR EMERGENCY US TELEPHONE: 1-800-228-5635

2 HAZARDS IDENTIFICATION

Globally Harmonized System Hazard Pictograms:

GHS Classifications:
Eye Irritation – Categories 2A & 2B
Skin Irritation – Category 2
Acute Oral Toxicity – Category 4
Reproductive Toxicant – Category 2
Acute Aquatic Toxicity – Category 2

GHS Signal Words: Warning

GHS Hazard Statements:
Causes eye irritation
Causes skin irritation
Harmful if Swallowed
Suspected of damaging fertility of the unborn child
Toxic to aquatic life

GHS Precautionary Statements:

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.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+350: IF ON SKIN: Gently wash with plenty of soap and water.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P330: Rinse mouth.
P332+313: IF SKIN IRRITATION OCCURS: Get medical advice/attention.
P337+313: IF EYE IRRITATION PERSISTS: Get medical advice/attention.
P362: Take off contaminated clothing and wash before reuse.
P391: Collect spillage.
P405: Store locked up.
P501: Dispose of contents/container in accordance with all regulations.

NFPA / HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3- High, 4-Extreme

National Fire Protection Association:

OSHA Hazardous Materials Identification System:

HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	B

3 COMPOSITION / INFORMATION ON INGREDIENTS

SODIUM NITRITE	7632-00-0	<10
SODIUM HYDROXIDE	1310-73-2	<5
SODIUM NITRATE	7631-99-4	<5

4 FIRST-AID MEASURES

Description of first aid measures: Contacting a physician or a poison control center may be needed.

Inhalation: Remove the victim from the contaminated area while protecting yourself from exposure by wearing an appropriate respirator. Put a similar respirator on the victim if possible. Get medical attention immediately if breathing difficulty or irritation is severe or continues.

Skin Contact: Remove contaminated clothing and shoes. In case of contact, immediately flush skin with plenty of water. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

Eye Contact: In case of contact, remove contact lenses, if worn, immediately flush eyes with plenty of water. Get medical attention immediately.

Ingestion: Rinse mouth with large amounts of water. If swallowed DO NOT induce vomiting unless directed to do so by medical personnel. Call a physician or a poison control center immediately.

Most Important Symptoms: Breathing difficulties or ingestion of product.

Indication of Immediate Medical Attention: No further relevant information available.

5 FIRE-FIGHTING MEASURES

Flash Point: None ^{o}F
Flammability Class: Non-flammable
Lower Explosive Limit: Not Established
Upper Explosive Limit: Not Established

Specific Hazards: None

Extinguishing Media: Use the appropriate extinguishing media for the surrounding fire.

Fire Fighting Instructions: In any chemical fire, firefighters should wear self-contained breathing apparatus and full protective gear.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, protective equipment, emergency procedures: Keep people away from and upwind of spill / leak. Restrict access to area until completion of clean-up. Collect and dispose of spilled material. Flush spill area with water. Refer to protective measures listed in Sections 7 and 8.

Methods and Materials for containment and cleaning up: Large spillage should be dammed-off and pumped into containers. Use absorbent material for final clean up and for small spills.

DO NOT let product enter drains. Discharge into the environment must be avoided.

Special spill response procedures:

Contact Prosar:
US Telephone Number: 1-800-228-5635

7 HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Do not taste or swallow. Use only with adequate personal protection. Wash thoroughly after handling.

Conditions for safe storage: Keep containers tightly closed. Keep away from children. Keep from freezing.

Incompatible materials: Keep away from acids.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits:

SODIUM NITRITE
Rat/Rabbit LD50 178 mg/kg
SODIUM HYDROXIDE
OSHA 2 mg/m^3
ACGIH 2 mg/m^3
100% SODIUM NITRATE
Dermal: 20.8 mg/kg
Inhalation: 37.6 mg/m^3

Engineering Controls:
Ventilation and engineering measures: Use with adequate general and local exhaust ventilation. General room ventilation is normally adequate.

Respiratory Protection: None normally required.
Skin Protection: Use chemical-resistant gloves.

Eye/Face Protection: Wear eye/face protection / chemical splash goggles / safety glasses with side shields.

Other protective equipment: Ensure that eyewash stations / safety showers are close to the work stations. Other equipment may be required depending on the workplace standards.

General hygiene considerations: Do not breathe vapors or spray mist. Avoid contact with skin, eyes, and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practices.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark red liquid
Auto-ignition Temperature: Not Determined
Chemical Type: Mixture
Decomposition Temperature: Not Determined
Evaporation Rate: Not Determined
Flammability: Non-flammable
Flash Point: Non-flammable
Initial Boiling Point / Boiling Range: 212 ^{o}F
Melting / Freezing Point: Not Determined
Molecular Weight: Not Applicable
Odor Threshold: Not Determined
Odor: Mild odor.
Other Physical / Chemical Comments: No additional information

Packing Density: Not Determined
Partition Coefficient: Not Determined
Percent VOCs: 0
Percent Volatiles: <80 (Water)
pH: 12 at concentration of 100%
Physical State: Liquid
Solubility in Water: Complete
Specific Gravity / Relative Density: 1.15
Upper / Lower Flammability or Explosive Limits: Non- flammable
Vapor Density: Not Determined
Vapor Pressure: Not Determined
Viscosity: Like water

10 STABILITY AND REACTIVITY

Chemical Stability: This material is expected to be stable under normal conditions of use

Possibility of Hazardous Reaction and Conditions to Avoid: Incompatible materials.

Incompatible Materials: Strong oxidizing agents, strong acids.

Hazardous Decomposition Products: Not determined.

Hazardous Polymerization: Will not occur.

11 TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure:
Routes of entry – Inhalation: Yes
Routes of entry – Eyes: Yes
Routes of entry – Ingestion: Yes– possible, but considered unlikely
Routes of entry – Skin: Yes

Potential Health Effects:
Signs and symptoms of short term (acute) exposure:
Eye Hazards: May causes eye irritation.
Skin Hazards: Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and/or possible. May cause dermatitis and similar skin disorders. blistering.
Ingestion Hazards: Harmful if swallowed.
Inhalation Hazards: Causes respiratory tract irritation.

Potential Chronic Health Effects: As listed above.
Mutagenicity: Not expected to be mutagenic in humans.
Carcinogenicity: The product and its ingredients have not been identified as carcinogen or probable carcinogen by NTP, IARC monographs or OSHA.
Reproductive Toxicity: Borax 5 component is suspected of damaging fertility of the unborn child.
Specific Target Organ Effects: No data available.
Toxicological Data: Oral toxicity is due to the Sodium Nitrite component.

12 ECOLOGICAL INFORMATION

Ecotoxicity: Aquatic toxicity due to Sodium Nitrite component.
Persistence and Degradability: No data available.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other Adverse Effects: No data available.

13 DISPOSAL CONSIDERATIONS

Handling for disposal: Handle in accordance with good industrial hygiene and safety practices. Refer to protective measures listed in sections 7 and 8. Empty containers retain residue (liquid and/or vapor) and can be dangerous.

Methods of disposal: Dispose in accordance with all applicable federal, state provincial and local regulations. Contact your local, state, provincial or federal environmental agencies for specific rules.

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state federal environmental agencies.

14 TRANSPORTATION INFORMATION

This is a non-hazardous Department of Transportation material and is a not regulated by the DOT for containers less than 110 gallons.

US 49 CFR/DOT information: N/A
- **UN Number:** N/A
- **UN Proper Shipping Name:** Use product name
- **Transport Hazard Class:** Containers larger than 110 gallons require hazard labeling and placards
- **Packaging Group:** N/A

DOT Shipping Label: N/A
Freight Class: 55
Environmental Hazard: No
Transport in Bulk: N/A

Special Precautions for User: None for Containers less than 110 gallons.

National Fire Protection Association: 2 - 0 - 0

15 REGULATORY INFORMATION

US Federal Information:

TSCA Information: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

SARA Section 313 Notification: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. This information must be included in all MSDSs / SDSs that are copied and distributed for this material.

Ingredient(s) - U.S. Regulatory Information

SODIUM NITRITE, SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

16 OTHER INFORMATION

Revision/Preparer Information:

ASAS / TYSOL, Inc.
SDS Preparer: JJM
SDS Preparer Phone Number: 651-730-4923

Disclaimer

The above information is to the best of our knowledge, current, accurate, and complete based on information reasonably available to us as of the date of preparation of this form. However, it is the user's responsibility to determine the safety, toxicity and suitability for his or her own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by us to the effects of such use or on the safety or toxicity of this product. Nor do we assume any liability arising out of use by others of the product. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when exception conditions or circumstances exist or because of applicable laws or regulations.

ASAS / TYSOL, Inc. does not claim this information to be all inclusive. It is provided independent of any sale of the product, for the purposes of hazard communication, and as a guide for the appropriate precautionary handling of the product by properly trained individuals. It is not intended to provide product performance or applicability information, and no express or implied warranty of any kind is made with respect to the product, the underlying product data, or the information contained herein.

You are urged to obtain GHS Safety Data Sheets for all products you buy, process, use or distribute, and are encouraged to advise those who may come in contact with such products of the information contained therein.

To determine the applicability or effect of any law or regulation with respect to the product, you should consult with your legal advisor or the appropriate government agency. We will not provide advice on such matter, or be responsible for any injury or damage resulting for the use of the product described herein.

END OF DOCUMENT