



SAFETY DATA SHEET

TS-WT-1

1. Identification

Product identifier TS-WT-1
Other means of identification Not available.
Recommended use Closed Cooling System Treatment
Recommended restrictions None known.

Company/undertaking identification

Team Supply Company, Inc.
 11474 Columbia Park Drive W.
 Jacksonville, Florida 32258
 T 904.262.5253

Emergency telephone

(800) 255-3924 Chemtel, Inc.

*Made by Premier Water & Energy
 Technology, Inc. for Snyder Equipment
 Company, Inc.*

Health	2
Flammable	0
Reactivity	1
Special	0

2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Acute toxicity, oral Category 4
 Skin corrosion/irritation Category 1
 Serious eye damage/eye irritation Category 1
 Carcinogenicity Category 2
 Reproductive toxicity Category 1B

OSHA defined hazards

Not classified.

Label elements



Signal word

Danger

Hazard statement

Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Suspected of causing cancer. May damage fertility or the unborn child.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor/. Specific treatment (see on this label). Wash contaminated clothing before reuse.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of contents/container to approved local facility.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Sodium nitrite		7632-00-0	20 - 40
Boric acid,disodium salt,pentahydrate		12179-04-3	2.0 - 6.0
Sodium Metasilicate		6834-92-0	2.0 - 6.0
Proprietary Ingredients*			
Proprietary Dye*			

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments	Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.
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4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Contains an oxidiser. Avoid all contact with reducing agents, oils, greases, organics and acids. Do not allow to dry. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Do not get this material on clothing. Provide adequate ventilation. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Protect from freezing. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store in accordance with local/regional/national/international regulation.

8. Exposure controls/personal protection

Occupational exposure limits

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Boric acid, disodium salt, pentahydrate (CAS 12179-04-3)	TWA	1 mg/m ³

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Splash proof chemical goggles. Face shield.

Skin protection

Hand protection

Chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece. A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Color

Blue

Material name: TS-WT-1

Version number: 3.0

Physical state	Liquid
Odor	Slight
Odor threshold	Not available.
pH (1% Solution)	~9.2
Melting point/freezing point	< 0 °F (< -18 °C)
Initial boiling point and boiling range	220 °F (104 °C)
Flash point	> 200 °F (> 93 °C) P-M(CC)
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mm Hg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1 (Air = 1)
Relative density	~10.4 lbs./gal.
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	12 cps
Viscosity temperature	70 °F (21 °C)
Other information	
Percent volatile	0 (Estimated)
Pour point	< 5 °F (< -15 °C)
Specific gravity	1.25

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Protect from freezing. Do not allow to dry.
Incompatible materials	Avoid contact with strong oxidizers. Avoid all contact with reducing agents, oils, greases, organics and acids.
Hazardous decomposition products	Oxides of boron Oxides of nitrogen evolved in fire. Oxides of carbon evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Can cause digestive tract burns. Harmful if swallowed.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Can cause skin burns.
Eye contact	Can cause eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Product	Species	Test Results
TS-WT-1 (CAS Mixture)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, (Estimated value)
Oral		
LD50	Rat	597 mg/kg, (Estimated value)

Components	Species	Test Results
Boric acid,disodium salt,pentahydrate (CAS 12179-04-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	2550 mg/kg
Sodium nitrite (CAS 7632-00-0)		
Acute		
Oral		
LD50	Rat	180 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation

Causes skin burns and eye damage.

Serious eye damage/eye irritation

Can cause serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization

Not available.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Not suspected of causing cancer.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

May damage fertility or the unborn child.

Specific target organ toxicity - single exposure

Causes damage to organs (blood) by ingestion. Causes damage to organs (blood) by inhalation.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Based on available data, the classification criteria are not met. Aspiration of this product may cause the same corrosiveness/irritation impacts as if it were ingested.

Chronic effects

Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results
TS-WT-1 (CAS Mixture)		
LC50	Ceriodaphnia	61 mg/L, Static Renewal Bioassay, 48 hour
	Fathead Minnow	1072 mg/L, Static Renewal Bioassay, 96 hour

Product		Species	Test Results
Crustacea	NOEL	Ceriodaphnia	15.6 mg/L, Static Renewal Bioassay, 48 hour
		Fathead Minnow	500 mg/L, Static Renewal Bioassay, 96 hour
	LC50	Daphnia magna	100 mg/L, Static Renewal Bioassay, 48 hour, pH of test solutions was adjusted to a level of 6-9.
	NOEL	Daphnia magna	38 mg/L, Static Renewal Bioassay, 48 hour, pH of test solutions was adjusted to a level of 6-9.
Other	LC50	Rainbow Trout	180 mg/L, Static Acute Bioassay, 96 hour
	NOEL	Rainbow Trout	100 mg/L, Static Acute Bioassay, 96 hour
Components		Species	Test Results
Sodium nitrite (CAS 7632-00-0)			
Fish	LC50	Fish	0.56 - 1.78 mg/l, 96 hour

* Estimates for product may be based on additional component data not shown.

Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
Environmental fate	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	Testing has shown product not to be readily biodegradable.
- COD (mgO2/g)	79 (calculated data)
- BOD 5 (mgO2/g)	0 (calculated data)
- BOD 28 (mgO2/g)	1 (calculated data)
- Closed Bottle Test (% Degradation in 28 days)	17 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days)	45 (calculated data)
- TOC (mg C/g)	4 (calculated data)

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	
UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Sodium Nitrite), RQ (Sodium Nitrite)
Transport hazard class(es)	
Class	9
Subsidiary risk	
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	171

Some containers may be DOT exempt, please check BOL for exact container classification.

IATA	
UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Sodium Nitrite)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III.
Environmental hazards	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
IMDG	
UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Sodium Nitrite), RQ Sodium Nitrite,
Transport hazard class(es)	Marine Pollutant
Class	
Subsidiary risk	9
Packing group	6.1
Environmental hazards	III
Marine pollutant	
EmS	Yes.
Special precautions for user	F-A, S-F
DOT	Read safety instructions, SDS and emergency procedures before handling.



IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Sodium nitrite (CAS 7632-00-0) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium nitrite (CAS 7632-00-0) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Sodium nitrite	7632-00-0	20 - 40

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - Massachusetts RTK - Substance List

Boric acid,disodium salt,pentahydrate (CAS 12179-04-3)

Sodium nitrite (CAS 7632-00-0)

US - Pennsylvania RTK - Hazardous Substances

Boric acid,disodium salt,pentahydrate (CAS 12179-04-3)

Sodium nitrite (CAS 7632-00-0)

US - Rhode Island RTK

Sodium nitrite (CAS 7632-00-0)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Sodium nitrite (CAS 7632-00-0) 500 LBS

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Jan-29-2020

Revision date Jan-29-2020

Version # 3.0

List of abbreviations

CAS: Chemical Abstract Service Registration Number
NFPA: National Fire Protection Association
ACGIH: American Conference of Governmental Industrial Hygienists
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
LD50: Lethal Dose, 50%
LC50: Lethal Concentration, 50%
NOEL: No Observed Effect Level
COD: Chemical Oxygen Demand
BOD: Biochemical Oxygen Demand
TOC: Total Organic Carbon
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
TLV: Threshold Limit Value

References: No data available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available.

Revision Information

Product and Company Identification: Commercial Names
Composition / Information on Ingredients: Disclosure Overrides
Toxicological Information: Toxicological Data
Transport Information: Material Transportation Information
HazReg Data: International Inventories
GHS: Classification

Made by Premier Water & Energy Technology, Inc. for Team Supply Company, Inc.