Safety Data Sheet: WT-55

Supercedes Date 03/06/2014 **Issuing Date** 08/21/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name WT-55
Recommended use Water treatment chemical
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 0837
Chemical nature Alkaline Aqueous solution
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Dark violet **Physical State** Liquid **Odor** Sweet

GHS
Classification

Physical Hazards

Oxidizing liquids	Category 2
Substances/mixtures corrosive to metal	Category 1

Health Hazard

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Reproductive Toxicity	Category 2
Carcinogenicity	Category 2
Specific target organ systemic toxicity (repeated exposure)	Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard Statements
H272 - May intensify fire; oxidizer
H314 - Causes severe skin burns and eye damage
H302 - Harmful if swallowed
H350 - May cause cancer
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, sparks, open flames or hot surfaces.
P221 - Take any precaution to avoid mixing with combustibles
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P260 - Do not breathe mist
P270 - Do not eat, drink or smoke when using this product
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P332 + P313 - If skin irritation occurs, get medical attention.
P363 - Wash contaminated clothing before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a physician
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311 - If experiencing respiratory symptoms, call a physician
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P406 - Store in a corrosion-resistant container.
P390 - Absorb spillage to prevent damage
P501 - Dispose of contents and container in accordance with applicable regulations.

6 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Sodium nitrite	7632-00-0	10-30
Sodium metaborate tetrahydrate	10555-76-7	1-5
Sodium silicate	1344-09-8	1-5
Sodium hydroxide	1310-73-2	1-5
Sodium tolyltriazole	64665-57-2	1-5
Phenolphthalein	77-09-8	0.1-1

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4. FIRST AID MEASURES

General advice Do not get in eyes, on skin or on clothing. Do not breathe mist.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.

Skin Contact Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

Inhalation Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person. Rinse mouth.

Notes to physician The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed. Since reversion of methemoglobin to hemoglobin occurs spontaneously after termination of exposure, moderate degrees of cyanosis need to be treated only by supportive measures.

5. FIRE-FIGHTING MEASURES

Flash Point Does not flash **Method** Not applicable

Flammability Limits in Air % Hydrogen, by reaction with metals. **Upper** 75 **Lower** 4

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO2). Foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Contact with metals liberates flammable hydrogen gas. Material can create slippery conditions.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA **Health** 3 **Flammability** 1 **Instability** 1 **Other** OX

HMIS **Health** 3 **Flammability** 1 **Instability** 1

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

Neutralizing Agent Acetic acid, diluted.

7. HANDLING AND STORAGE

Handling Do not get in eyes, on skin or on clothing. Do not breathe mist.

Storage Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Metal containers must be lined. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Storage Temperature **Minimum** 35 °F / 2 °C **Maximum** 120 °F / 49 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH

Sodium metaborate tetrahydrate	TWA: 2 mg/m^3	No data available	No data available
Sodium hydroxide	Ceiling: 2 mg/m^3	TWA: 2 mg/m^3	10 mg/m^3 Ceiling: 2 mg/m^3

Engineering Measures Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin Protection Wear suitable protective clothing, Impervious gloves.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Non viscous
Color	Dark violet	**Odor**	Sweet
Odor Threshold	Not applicable	**Appearance**	Transparent - Slightly hazy
pH	13	**Specific Gravity**	1.27
Evaporation Rate	0.41	**Percent Volatile (Volume)**	80.8
VOC Content (%)	0	**VOC Content (g/L)**	0
Vapor Pressure	12.3 mmHg @ 70°F	**Vapor Density**	0.6
Solubility	Completely soluble	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available
Boiling Point/Range	212 °F / 100 °C	**Flammability (solid, gas)**	No data available
Flash Point	Does not flash	**Method**	Not applicable
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Hydrogen, by reaction with metals.	**Upper** 75 **Lower** 4	

10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous polymerization does not occur.

Conditions to Avoid None known

Incompatible Products Acids, Ammonium salts, Reducing agents, Acid anhydrides, Amines, Aldehydes, Nitrous acid and other nitrosating agents, Phosphorus compounds, Halogenated hydrocarbon, Tetrahydrofuran.

Hazardous Decomposition Products Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.

Possibility of Hazardous Reactions None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50 361.41

Dermal LD50 45,772.80

Inhalation LC50

Gas No information available

Mist 23.50

Vapor 23.50

Principle Route of Exposure Skin contact, Eye contact, Inhalation.

Primary Routes of Entry Ingestion

Acute Effects

Eyes Causes eye burns.

Skin Causes skin burns.

Inhalation Harmful by inhalation. Causes burns. Blood disorder may occur after prolonged inhalation. Methemoglobinemia.

Ingestion Ingestion causes burns of the upper digestive and respiratory tracts. Components of the product create formation of methemoglobin. Blood disorder may occur after ingestion. Lowered blood pressure.

Chronic Toxicity Inhaled corrosive substances can lead to a toxic edema of the lungs. May cause disorder and damage to the spleen. Contains a known or suspected carcinogen. Contains a known or suspected reproductive toxin.

Target Organ Effects Blood, Liver, Kidney, Spleen, Heart, Central nervous system, Skin, Eyes, Testes.

Aggravated Medical Conditions Blood disorders, Liver disorders, Kidney disorders, Heart disease, Respiratory disorders, Neurological disorders, Skin disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Sodium nitrite	= 85 mg/kg (Rat)	no data available	= 5.5 mg/L (Rat) 4 h	no data available	no data available
Sodium silicate	= 1153 mg/kg (Rat)	no data available	no data available	no data available	no data available
Sodium hydroxide	no data available	= 1350 mg/kg (Rabbit)	no data available	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium nitrite	no data available	no data available	no data available	no data available	liver, kidneys, nervous system, spleen, blood, heart
Sodium metaborate tetrahydrate	no data available	no data available	no data available	X	Testes
Sodium silicate	no data available	no data available	no data available	no data available	kidneys
Sodium hydroxide	no data available	no data available	no data available	no data available	eyes, respiratory system, skin
Phenolphthalein	no data available	no data available	no data available	no data available	lungs

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Sodium nitrite	not applicable	not applicable	not applicable	not applicable	not applicable
Phenolphthalein	not applicable	Group 2B	Reasonably Anticipated	X	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Sodium nitrite	no data available	LC50 0.092 - 0.13 mg/L Oncorhynchus mykiss 96 h LC50 0.4 - 0.6 mg/L Oncorhynchus mykiss 96 h LC50 0.65 - 1 mg/L Oncorhynchus mykiss 96 h LC50 = 0.19 mg/L Oncorhynchus mykiss 96 h LC50 = 2.3 mg/L Pimephales promelas 96 h LC50 = 20 mg/L Pimephales promelas 96 h	no data available	no data available	-3.7
Sodium silicate	no data available	LC50 301 - 478 mg/L Lepomis macrochirus 96 h LC50 = 3185 mg/L Brachydanio rerio 96 h	no data available	EC50 216 mg/L Daphnia magna 96 h	N/A
Sodium hydroxide	no data available	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h	no data available	no data available	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of contents/container in accordance with local regulation.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Caustic alkali liquids, n.o.s.
Hazard Class 8
UN-No UN1719
Packing Group III
Reportable Quantity (RQ) RQ@ 427lbs
Description UN1719, Caustic alkali liquids, n.o.s., (Sodium nitrite,Sodium hydroxide),8,PG III

TDG

Proper shipping name Caustic alkali liquid, n.o.s
Hazard Class 8

UN-No UN1719
Packing Group III

ICAO

UN-No UN1719
Proper Shipping Name Caustic alkali liquids, n.o.s.
Hazard Class 8
Packing Group III
Shipping Description UN1719, Caustic alkali liquids, n.o.s., (Sodium nitrite,Sodium hydroxide),8,PG III

IATA

UN-No UN1719
Proper Shipping Name Caustic alkali liquids, n.o.s.
Hazard Class 8
Packing Group III
ERG Code 8L
Shipping Description UN1719,Caustic alkali liquids, n.o.s.,(Sodium nitrite,Sodium hydroxide),8,PG III

IMDG/IMO

Proper Shipping Name Caustic alkali liquids, n.o.s.
Hazard Class 8
UN-No UN1719
Packing Group III
EmS No. F-A, S-B
Shipping Description UN1719, Caustic alkali liquids, n.o.s.,(Sodium nitrite,Sodium hydroxide),8,PG III

15. REGULATORY INFORMATION

Inventories
TSCA Complies
DSL Complies
U.S. Federal Regulations
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Sodium nitrite	7632-00-0	10-30	1.0
Phenolphthalein	77-09-8	0.1-1	0.1

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium nitrite	100 lb	Not applicable
Sodium hydroxide	1000 lb	Not applicable

16. OTHER INFORMATION

Prepared By Brittany Wilson
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Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

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