# Safety Data Sheet: WT-41

**Supercedes Date** 08/04/2011 **Issuing Date** 10/08/2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** WT-41
**Recommended use** Corrosion inhibitor
**Information on Manufacturer**
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

**Product Code** 0748
**Chemical nature** Aqueous solution
**Emergency Telephone Number**
CHEMTREC® 800-424-9300
**Telephone inquiry**
972-579-2477

## 2. HAZARD IDENTIFICATION

**Color** Light yellow **Physical State** Liquid **Odor** Sweet

**GHS Classification**

*Physical Hazards*

| | |
|---|---|
| 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 |
| Specific target organ systemic toxicity (repeated exposure) | Category 2 |

*Other hazards*
None

**Labeling**
*Signal Word*
**DANGER**

*Hazard Statements*
H314 - Causes severe skin burns and eye damage
H302 - Harmful if swallowed
H373 - May cause damage to organs through prolonged or repeated exposure
H290 - May be corrosive to metals

*Precautionary Statements*
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.
P390 - Absorb spillage to prevent damage
P406 - Store in a corrosion-resistant container.
P501 - Dispose of contents and container in accordance with applicable regulations.

2 % 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 hydroxide | 1310-73-2 | 1-5 |
| Polycarboxylate, sodium salt | 25085-41-0 | 1-5 |

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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 breathing has stopped, apply 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** > 201 °F / > 94 °C **Method** Seta closed cup

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

**Suitable Extinguishing Media**

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

**Unsuitable Extinguishing Media**

None known.

**Specific hazards arising from the chemical**

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

**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 |
| **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** Wear personal protective equipment. Ensure adequate ventilation. 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 dry, cool and 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 hydroxide | Ceiling: 2 mg/m$^3$ | TWA: 2 mg/m$^3$ | 10 mg/m$^3$<br>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. Remove and wash contaminated clothing before re-use. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| **Physical State** | Liquid | **Viscosity** | Non viscous |
| **Color** | Light yellow | **Odor** | Sweet |
| **Odor Threshold** | Not applicable | **Appearance** | Transparent |
| **pH** | 13.5 | **Specific Gravity** | 1.15 |
| **Evaporation Rate** | 0.48 (BuAc = 1) | **Percent Volatile (Volume)** | 89 |
| **VOC Content (%)** | 0.9 | **VOC Content (g/L)** | 10 |
| **Vapor Pressure** | 14.2 mmHg @ 68°F | **Vapor Density** | 0.6 (Air = 1.0) |
| **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** | > 201 °F / > 94 °C | **Method** | Seta closed cup |
| **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** | Strong oxidizing agents, Strong acids, Reducing agents, Ammonium salts, Amines, Metals. |
| **Hazardous Decomposition Products** | Carbon oxides, Nitrogen oxides (NOx), Hydrogen, by reaction with metals. |
| **Possibility of Hazardous Reactions** | Oxidizing potential |

## 11. TOXICOLOGICAL INFORMATION

Product Information — No information available.

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

| | |
|---|---|
| **Oral LD50** | 566.67 |
| **Dermal LD50** | 37,337.92 |
| **Inhalation LC50** | |
| **Gas** | No information available |
| **Mist** | 36.67 |
| **Vapor** | 36.67 |

| | |
|---|---|
| **Principle Route of Exposure** | Skin contact, Eye contact, Inhalation. |
| **Primary Routes of Entry** | Ingestion, Inhalation. |
| **Acute Effects** | |
| **Eyes** | Corrosive to the eyes and may cause severe damage including blindness. |
| **Skin** | Causes skin burns. |
| **Inhalation** | Harmful by inhalation. Causes burns. Blood disorder may occur after prolonged inhalation. Methemoglobinemia. Lowered blood pressure. |
| **Ingestion** | Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Components of the product create formation of methemoglobin. |
| **Chronic Toxicity** | Inhaled corrosive substances can lead to a toxic edema of the lungs. |
| **Target Organ Effects** | Respiratory system, Blood, Liver, Heart, Spleen, Kidney, Skin. |
| **Aggravated Medical Conditions** | Respiratory disorders, Neurological disorders, Skin disorders, Kidney disorders, Liver disorders, Blood disorders, Heart disease. |

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 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 hydroxide | no data available | no data available | no data available | no data available | eyes, respiratory system, skin |

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | ACGIH | IARC | NTP | OSHA | Other |
|---|---|---|---|---|---|
| Sodium nitrite | not applicable | not applicable | not applicable | not applicable | 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<br>LC50 0.4 - 0.6 mg/L Oncorhynchus mykiss 96 h<br>LC50 0.65 - 1 mg/L Oncorhynchus mykiss 96 h<br>LC50 = 0.19 mg/L Oncorhynchus mykiss 96 h<br>LC50 = 2.3 mg/L Pimephales promelas 96 h<br>LC50 = 20 mg/L Pimephales promelas 96 h | no data available | no data available | -3.7 |
| 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 in accordance with local regulations.
**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
**Description** UN1719,Caustic alkali liquids, n.o.s.(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 liquid, n.o.s.*
**Hazard Class** 8
**Packing Group** III
**Shipping Description** UN1719,Caustic alkali liquid, n.o.s.,(Sodium Hydroxide),8,PG III

**IATA**

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

**IMDG/IMO**

| | |
|---|---|
| **Proper Shipping Name** | Caustic alkali liquid, n.o.s. |
| **Hazard Class** | 8 |
| **UN-No** | UN1719 |
| **Packing Group** | III |
| **EmS No.** | F-A, S-B |
| **Shipping Description** | UN1719, Caustic alkali liquid, n.o.s.,(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 |

**SARA 311/312 Hazardous Categorization**

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

**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** | Adrienne McKee |
| **Supercedes Date** | 08/04/2011 |
| **Issuing Date** | 10/08/2014 |
| **Reason for Revision** | No information available. |
| **Glossary** | No information available. |
| **List of References.** | No information available. |

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