

# GLENDO LLC

## SAFETY DATA SHEET

### 1. PRODUCT & COMPANY INFORMATION

#### 1.1 PRODUCT IDENTIFIER(S)

**Product Name:** Wetting Agent Concentrate - Water Additive

**Stock Number:** 002-167, 001-599B, 001-599B-220, 001-610, 001-610-220, 001-659, 001-660, 001-600, 001-605, 001-600-220, 001-605-220, 001-612, 001-831, 001-896, 001-970, 001-612-220, 001-831-220, 001-896-220, 001-970-220

#### 1.2 COMPANY INFORMATION

**Distributor's Name:** Glendo LLC

**Address:** 900 Overlander Road, Emporia, KS 66801

**Phone:** (620) 343-1084

### 2. HAZARDS IDENTIFICATION

#### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE



H272: MAY INTENSIFY FIRE; OXIDIZER



H319: CAUSES SERIOUS EYE IRRITATION



WARNING

#### 2.2 GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

##### LABEL ELEMENTS

**GHS label elements:** The product is classified and labeled according to the Globally Harmonized System (GHS).

##### HAZARD PICTOGRAMS



GHS02



GHS08



GHS07



GHS06



GHS09

**SIGNAL WORD:** Danger

**HAZARD-DETERMINING COMPONENTS OF LABELING:** Sodium Tetraborate Decahydrate and Sodium Nitrate

##### HAZARD STATEMENTS

H272 May intensify fire; oxidizer

H301 Toxic if swallowed

- H319 Causes serious eye irritation  
 H350 May cause cancer  
 H360 May damage fertility or the unborn child  
 H400 Very toxic to aquatic life

### **PRECAUTIONARY STATEMENTS**

- P201 Obtain special instructions before use  
 P202 Do not handle until all safety precautions have been read and understood  
 P210 Keep away from heat  
 P220 Keep/Store away from clothing/combustible materials  
 P221 Take precautions to avoid mixing with combustibles  
 P264 Wash skin thoroughly after handling  
 P270 Do not eat, drink or smoke when using this product  
 P273 Avoid release to the environment  
 P280 Wear protective gloves/eye protection/face protection  
 P281 Use protective equipment as required

**IF EXPOSED OR CONCERNED:** P308 + P313 Get medical attention.

**IF SWALLOWED:** P301+ P310 + P330 Immediately call a Poison Control Center or or doctor/physician. Rinse mouth.

**IF IN EYES:** P305 + P351 + P338 Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**IF EYE IRRITATION PERSISTS:** P337 + P313 Get medical attention.

**IN CASE OF FIRE:** P370 + P378 Use dry sand, dry chemical or alcohol-resistant foam for extinguishing

- P391 Collect spillage  
 P405 Store locked up  
 P501 Dispose of contents/container at an approved waste disposal facility

### **2.3 HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS**

None

## **3. COMPOSITION / INFORMATION ON INGREDIENTS**

### **3.1 SUBSTANCES**

**Hazardous Components:** Listed below

<b><u>CHEMICAL NAME</u></b>	<b><u>CAS #</u></b>	<b><u>Amount</u></b>
<b>Sodium Tetraborate Decahydrate</b>	CAS#1303-96-4 EC# 215-540-4	67% by WT
<b>Sodium Nitrite</b>	CAS# 7632-00-0 EC# 231-555-9	33% by WT

Disodium tetraborate decahydrate Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

Repr. 1B; H360 <= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **4. FIRST AID MEASURES**

### **4.1 DESCRIPTION OF FIRST AID MEASURES**

**GENERAL ADVICE:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**IF INHALED:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**IN CASE OF SKIN CONTACT:** Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**IN CASE OF EYE CONTACT:** Flush eyes with water as a precaution.

**IF SWALLOWED:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

### **4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

The most important known symptoms and effects are described in labelling (see section 2.2) and/or in section 11.

### **4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED**

No data available.

## **5. FIREFIGHTING MEASURES**

### **5.1 EXTINGUISHING MEDIA**

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### **5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE**

Nitrogen oxides (NO<sub>x</sub>), Sodium oxides

Borane/boron oxides, Sodium oxides

### **5.3 ADVICE FOR FIREFIGHTERS**

Wear self-contained breathing apparatus for firefighting.

### **5.4 FURTHER INFORMATION**

The product itself does not burn. Use water spray to cool unopened containers.

## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### **6.2 ENVIRONMENTAL PRECAUTIONS**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

### **6.4 REFERENCE TO OTHER SECTIONS**

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No smoking. Keep away from heat and sources of ignition. For precautions see section 2.2.

### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic Storage class (TRGS 510): Oxidizing hazardous materials

### 7.3 SPECIFIC END USE(S)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION / CONTROL PARAMETERS

### Components with workplace control parameters:

#### 8.1 CONTROL PARAMETERS

Components with workplace control parameters

Component	CAS-No.	Value	Control Parameters	Basis
Disodium Tetraborate Decahydrate	1303-96-4	TWA	2.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
	<b>Remarks</b>	Upper Respiratory Tract irritation. Not classifiable as a human carcinogen		Varies
		STEL	6.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV) Upper
		Respiratory Tract irritation Not classifiable as a human carcinogen		Varies
		TWA	5.000000 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		TWA	2.000000 mg/m <sup>3</sup>	
		Upper Respiratory Tract irritation Not classifiable as a human carcinogen		Varies
		STEL	6.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract irritation Not classifiable as a human carcinogen		Varies
		TWA	2.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract irritation Not classifiable as a human carcinogen		Varies
		STEL	6.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract irritation Not classifiable as a human carcinogen		Varies

Contains no substances with occupational exposure limit values.

#### 8.2 EXPOSURE CONTROLS

Personal protective equipment.

**EYE/FACE PROTECTION**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**SKIN PROTECTION**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Full contact**

**Material:** Nitrile rubber

**Minimum layer thickness:** 0.11 mm

**Break through time:** 480 min

**Material tested:** Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Splash contact**

**Material:** Nitrile rubber

**Minimum layer thickness:** 0.11 mm

**Break through time:** 480 min

**Material tested:** Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Data source:** KCL GmbH, D-36124 Eichenzell, phone: +49 (0)6659 87300, e-mail: sales@kcl.de

**Test method:** EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**BODY PROTECTION**

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**RESPIRATORY PROTECTION**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**CONTROL OF ENVIRONMENTAL EXPOSURE**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

a) **Appearance:** Solid

b) **Odor:** No data available

c) **Odor Threshold:** No data available

d) **pH:** 9.0 to 9.2 @ 10 gm/L

e) **Melting point / freezing point:** No data available (mixture)

f) **Initial boiling point and boiling:** No data available (mixture)

g) **Flash point:** No data available (mixture)

h) **Evaporation rate:** No data available

i) **Flammability (solid, gas):** No data available

j) **Lower / Upper explosive limits:** No data available

- k) Vapor pressure:** No data available (mixture)  
**l) Vapor density:** No data available  
**m) Relative density:** Not determined  
**n) Water solubility:** 38.1 to 820 gm/L @ 25°C / 77°F  
**o) Partition coefficient:** No data available (mixture) **N-octanol/water** no data available (mixture)  
**p) Auto-ignition temperature:** No data available  
**q) Decomposition temperature:** No data available  
**r) Viscosity:** No data available  
**s) Explosive properties:** No data available  
**t) Oxidizing properties:** Oxidizing (Category 3)

## **9.2 OTHER SAFETY INFORMATION**

No data available

## **10. STABILITY AND REACTIVITY**

### **10.1 REACTIVITY**

No data available

### **10.2 CHEMICAL STABILITY**

Stable under recommended storage conditions

### **10.3 POSSIBILITY OF HAZARDOUS REACTIONS**

No data available

### **10.4 CONDITIONS TO AVOID**

Exposure to moisture (sodium nitrite)

### **10.5 INCOMPATIBLE MATERIALS**

Strong oxidizers, strong reducers, acids, powdered metals, ammonia, cyanides, amines, activated carbons, combustible materials

### **10.6 HAZARDOUS DECOMPOSITION PRODUCTS**

**Other decomposition products:** No data available

**In the event of fire:** See section 5

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 INFORMATION ON TOXICOLOGICAL EFFECTS**

**Acute Toxicity:** LD50 Oral – Rat - >160 mg/kg

**Inhalation:** No data available

**Dermal:** No data available

**Skin corrosion/irritation:** No data available

### **SERIOUS EYE DAMAGE / EYE IRRITATION**

**Eyes:** Rabbit

**Result:** Eye irritation – 24 hr

(OECD Test Guideline 405)

### **RESPIRATORY OR SKIN SENSITIZATION**

No data available

### **GERM CELL MUTAGENICITY**

No data available

## CARCINOGENIC CATEGORIES

LIT-SDS-011

**IARC (International Agency for Research on Cancer):** 2A – Group 2A: Probably carcinogenic to humans (Sodium nitrite). No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC (Sodium tetraborate decahydrate).

**NTP (National Toxicology Program):** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

**OSHA (Occupational Safety & Health Administration):** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

## REPRODUCTIVE TOXICITY

Fetotoxicity - Presumed human reproductive toxicant

## SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

No data available

## SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

No data available

## ASPIRATION HAZARD

No data available

## ADDITIONAL INFORMATION

### RTECS: VZ2275000

Animal feeding studies in rat, mouse and dog, at high doses, have demonstrated effects on fertility and testes. Studies with the chemically related boric acid in the rat, mouse and rabbit, at high doses, demonstrate developmental effects on the fetus, including fetal weight loss and minor skeletal variations. The doses administered were many times in excess of those to which humans would normally be exposed. Human epidemiological studies show no increase in pulmonary disease in occupational populations with chronic exposures to boric acid dust and sodium borate dust. A recent epidemiological study under the conditions of normal occupational exposure to borate dusts indicated no effect on fertility.

## ADDITIONAL INFORMATION

### RTECS: RA1225000

Headache, nausea, incoordination. Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Liver - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 TOXICITY

#### Toxicity to fish:

LC50 - Carassius auratus (goldfish) - 178 mg/l - 72 h flow-through test

LC50 - Oncorhynchus mykiss (rainbow trout) - 0.94 - 1.92 mg/l - 96.0 h mortality

NOEC - Oncorhynchus mykiss (rainbow trout) - 0.54 mg/l - 96.0 h

#### Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water flea) - 12.5 mg/l - 48 h

#### Toxicity to algae:

NOEC - Desmodesmus subspicatus (green algae) - 100 mg/l - 72 h (OECD Test Guideline 201)

### 12.2 PERSISTENCE AND DEGRADABILITY

The methods for determining biodegradability are not applicable to inorganic substances.

### 12.3 BIOACCUMULATIVE POTENTIAL

No data available

### 12.4 MOBILITY IN SOIL

No data available

## 12.5 RESULTS OF PBT AND VPVB ASSESSMENT

LIT-SDS-011

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 OTHER ADVERSE EFFECTS

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 WASTE TREATMENT METHODS

**Product:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging:** Dispose of as unused product.

## 14. TRANSPORT INFORMATION

	DOT (US)	IMDG	IATA
UN/NA#	1500	1500	1500
PACK GRP	3	3	3
SHIP NAME	Sodium Nitrite	Sodium Nitrite	Sodium Nitrite
PLACARD #	5.1 (6.1)	5.1 (6.1)	5.1 (6.1)
ENV. HAZARD	MARINE POLLUTANT	MARINE POLLUTANT	MARINE POLLUTANT
<b>LAND (as per ADR classification): REGULATED</b>			
Sodium Tetraborate Decahydrate			
	DOT (US)	IMDG	IATA
	Not dangerous goods	Not dangerous goods	Not dangerous goods

## 15. REGULATORY INFORMATION

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 311 / 312 Hazards:** Chronic Health Hazard

**SARA 313 Components:** The following components are subject to reporting levels established by SARA Title III, Section 313: Sodium nitrite CAS-No. 7632-00-0 Revision Date 2007-07-01

Substance	CAS-No.	Revision Date
<b>Massachusetts Right To Know Components</b>		
Disodium tetraborate decahydrate	1303-96-4	2007-03-01
Sodium nitrite	7632-00-0	2007-07-01
<b>Pennsylvania Right To Know Components</b>		
Disodium tetraborate decahydrate	1303-96-4	2007-03-01
Sodium nitrite	7632-00-0	2007-07-01
<b>New Jersey Right To Know Components</b>		
Disodium tetraborate decahydrate	1303-96-4	2007-03-01
Sodium nitrite	7632-00-0	2007-07-01
<b>California Prop. 65 Components:</b>	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	



# 16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

**Acute Tox.** Acute toxicity

**Aquatic Acute** Acute aquatic toxicity

**Carc.** Carcinogenicity

**Eye Irrit.** Eye irritation

**H272** May intensify fire; oxidizer.

**H301** Toxic if swallowed.

**H319** Causes serious eye irritation.

**H350** May cause cancer.

**H400** Very toxic to aquatic life.

**Ox. Sol.** Oxidizing solids

<p><b>NFPA</b></p>	<p><b>HMIS</b></p> <table border="1"> <tr> <td style="background-color: #0056b3; color: white;">Health Hazard</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #d62728; color: white;">Fire Hazard</td> <td style="text-align: center;">0</td> </tr> </table> <p>Chronic Health Hazard: * Physical Hazard: 1</p>	Health Hazard	2	Fire Hazard	0
Health Hazard	2				
Fire Hazard	0				

## FURTHER INFORMATION

User is granted the ability to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. GLENDO, LLC. shall not be held liable for any damage resulting from handling or from contact with the above product.

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