SAFETY DATA SHEET

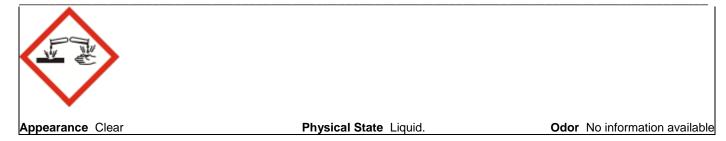
Issuing Date 07-Aug-2013 Revision Date 07-Aug-2020 **Revision Number 1 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING GHS product identifier Product Name UNI-SAN** Other means of identification USA Product Code(s) **UN-Number** UN1791 Synonyms USA Recommended use of the chemical and restrictions on use **Recommended Use** Institutional dish machine detergent Uses advised against No information available Supplier's details **Supplier Address** Uni-Kem Chemicals, Inc. 802 Wm. Leigh Dr Tullytown, PA 19007 TEL: 800-752-1120 **Emergency telephone number Emergency Telephone** CHEM-TEL, INC. Number 24 Hour Emergency Contact 1-800-255-3924 2. HAZARDS IDENTIFICATION Classification This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200) Skin Corrosion/Irritation Category 1 Subcategory 1B Serious Eye Damage/Eye Irritation

GHS Label elements, including precautionary statements

Emergency Overview

Category 1

Signal Word Danger Hazard Statements Causes severe skin burns and eye damage



Precautionary Statements

Prevention

- Do not breathe dust/fume/gas/mist/vapors/spray
- · Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection.

General Advice

• Immediately call a POISON CENTER or doctor/physician.

Eyes

• 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 or doctor/physician.

Skin

• IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

• Wash contaminated clothing before reuse.

Inhalation

• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Ingestion

· IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

Store locked up.

Disposal

• Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

USA

| Chemical Name | CAS-No | Weight % | Trade secret |
|---------------------|-----------|----------|--------------|
| Sodium hypochlorite | 7681-52-9 | 5-15 | * |
| | | | |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measuresEye ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Immediate medical attention is required.Skin ContactWash off immediately with soap and plenty of water. Remove and wash contaminated
clothing before re-use. Immediate medical attention is required.InhalationMove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.IngestionDrink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an
unconscious person. Immediate medical attention is required.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

No information available

| Explosion Data | |
|----------------------------------|-------|
| Sensitivity to Mechanical Impact | None. |
| Sensitivity to Static Discharge | None |

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| Personal Precautions | Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Stop leak if you can do it without risk. If spilled, take caution, as material can cause surfaces to become very slippery. | |
|---|--|--|
| Environmental Precautions | | |
| Environmental Precautions | Dispose of contents/container to an approved waste disposal plant. | |
| Methods and materials for containment and cleaning up | | |
| | | |
| Methods for Containment | Stop leak if you can do it without risk | |
| Methods for Cleaning Up | Contain spill, dilute with water and neutralize as required. Wash away small spills with plenty of water. | |

7. HANDLING AND STORAGE

Precautions for safe handling Handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Do not take internally. Wash thoroughly after handling. Conditions for safe storage, including any incompatibilities Storage Store at room temperature. Keep container closed when not in use. Keep out of the reach of children. **Incompatible Products** Heavy metals. Reducing agents. Acids. Do not mix with anything but water 8. EXPOSURE CONTROLS / PERSONAL PROTECTION **Control parameters Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. Appropriate engineering controls **Engineering Measures** Showers Eyewash stations Ventilation systems Individual protection measures, such as personal protective equipment **Eve/Face Protection** Chemical splash goggles. **Skin and Body Protection** Rubber gloves. Neoprene gloves. **Respiratory Protection** Particle filtering face piece **Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical State | Liquid | Appearance | Clear |
|--|---|---|--------------------------|
| Odor | No information available | Odor Threshold | No information available |
| Property pH Melting Point/Range Boiling Point/Boiling Range Flash Point Evaporation rate Flammability (solid, gas) Flammability Limits in Air upper flammability limit lower flammability limit Vapor Pressure Vapor Density Relative Density Specific Gravity Water Solubility Solubility in other solvents Partition coefficient: n-octand | Values10.0No data available> 100 °C / > 212 °FNo data availableNo data available100%No data availableNo data availableNo data available | Remarks/ - Metl (4 % solution) None known None known | <u>hod</u> |
| Autoignition Temperature | No data available | None known | |
| Decomposition Temperature | No data available | None known | |

| Viscosity | No data available |
|--|--|
| Flammable Properties | Not flammable |
| Explosive Properties Oxidizing Properties | No data available No data available |
| Other information | |
| VOC Content (%) | No data available |

10. STABILITY AND REACTIVITY

None known

Reactivity

No data available. Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Incompatible products. Protect from light. Heat.

Incompatible materials

Heavy metals. Reducing agents. Acids. Do not mix with anything but water

Hazardous decomposition products

Chlorine gas acids and salts.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| Inhalation | May cause irritation of respiratory tract. |
|--------------|---|
| Eye Contact | Causes serious eye damage. |
| Skin Contact | Causes severe skin burns. |
| Ingestion | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------|--------------------|------------------------|-----------------|
| Water | 90 mL/kg (Rat) | - | - |
| Sodium hypochlorite | = 8200 mg/kg (Rat) | > 10000 mg/kg (Rabbit) | - |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

| Sensitization | No information available. |
|-------------------|--|
| Mutagenic Effects | No information available. |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|-----------------------------|-------------------------|-------------|-----|------|
| Sodium hypochlorite | | Group 3 | | |
| IARC: (International Agen | cy for Research on | Cancer) | | • |
| Group 3: Not Classifiable a | s to its Carcinogenicit | y to Humans | | |
| Reproductive Toxicity | No informatio | n available | | |

Reproductive ToxicityNo information available.STOT - single exposureNo information available.STOT - repeated exposureNo information available.Aspiration HazardNo information available.

Numerical measures of toxicity - Product

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document:LD50 Oral6061 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|---------------------|-------------------------|------------------------------|-------------------------------|-------------------------------|
| Sodium hypochlorite | EC50 24 h: = 0.095 mg/L | LC50 96 h: 0.03 - 0.19 mg/L | | EC50 48 h: 0.033 - 0.044 |
| 7681-52-9 | (Skeletonema costatum) | semi-static (Oncorhynchus | | mg/L Static (Daphnia |
| | | mykiss) | | magna) |
| | | LC50 96 h: 0.05 - 0.771 | | EC50 96 h: = 2.1 mg/L |
| | | mg/L flow-through | | (Daphnia magna) |
| | | (Oncorhynchus mykiss) | | |
| | | LC50 96 h: 0.06 - 0.11 mg/L | | |
| | | flow-through (Pimephales | | |
| | | promelas) | | |
| | | LC50 96 h: 0.18 - 0.22 mg/L | | |
| | | static (Oncorhynchus | | |
| | | mykiss) | | |
| | | LC50 96 h: 0.28 - 1 mg/L | | |
| | | flow-through (Lepomis | | |
| | | macrochirus) | | |
| | | LC50 96 h: 0.4 - 0.8 mg/L | | |
| | | static (Lepomis macrochirus) | | |
| | | LC50 96 h: 4.5 - 7.6 mg/L | | |
| | | static (Pimephales promelas) | | |

Persistence and Degradability No

No information available.

Bioaccumulation

No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging

Do not re-use empty containers.

| Chemical Name | California Hazardous Waste |
|---------------------|----------------------------|
| Sodium hypochlorite | Toxic |
| | Ignitable |
| | Reactive |

14. TRANSPORT INFORMATION

<u>DOT</u> UN-Number

UN1791

| USA UNISAN | |
|---|--|
| Proper shipping name Hazard Class Packing Group Reportable Quantity (RQ) Description Emergency Response Guide Number | Hypochlorite solutions 8 II Sodium hypochlorite: RQ kg= 550.30 UN1791, Hypochlorite solutions, 8, II, RQ 154 |
| TDG UN-Number Proper Shipping Name Hazard Class Packing Group Description | UN1791 Hypochlorite solution 8 II UN1791, Hypochlorite solution, 8, II |
| UN-Number Proper Shipping Name Hazard Class Packing Group Description | UN1791 Hypochlorite solution 8 II UN1791, Hypochlorite solution, 8, II |
| ICAO UN-Number Proper shipping name Hazard Class Packing Group Description | UN1791 Hypochlorite solution 8 II UN1791, Hypochlorite solution, 8, II |
| IATA UN-Number Proper Shipping Name Hazard Class Packing Group ERG Code Description | UN1791 Hypochlorite solution 8 II 8L UN1791, Hypochlorite solution, 8, II |
| IMDG/IMO UN-Number Proper Shipping Name Hazard Class Packing Group EmS No. Description UN-Number Proper Shipping Name Hazard Class | UN1791 Hypochlorite solution 8 II F-A, S-B UN1791, Hypochlorite solution, 8, II UN1791 Hypochlorite solution 8 |
| Packing Group Classification Code Description | II C9 UN1791, Hypochlorite solution, 8, II |
| ADR UN-Number Proper Shipping Name Hazard Class Packing Group Classification Code Tunnel Restriction Code Description | UN1791 Hypochlorite solution 8 II C9 (E) UN1791, Hypochlorite solution, 8, II, (E) |

ADR/RID-Labels

| Proper Shipping Name | Hypochlorite solution |
|----------------------|--------------------------------------|
| Hazard Class | 8 |
| Packing Group | II |
| Classification Code | C9 |
| Special Provisions | 521 |
| Description | UN1791, Hypochlorite solution, 8, II |
| Limited Quantity | 1 L |

8

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|----------|
| TSCA | Complies |
| DSL | Complies |
| EINECS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

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

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| Sodium hypochlorite | 100 lb | | | Х |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|------------------------|--------------------------|---------------------------------------|---|
| Sodium hypochlorite | 100 lb | | RQ 100 lb final RQ RQ 45.4 kg final RQ |
| ILS State Pequilations | • | • | |

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|---------------------|------------|---------------|--------------|----------|--------------|
| Sodium hypochlorite | Х | Х | Х | | |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| 16. OTHER INFORMATION | | | | |
|-----------------------|-----------------|----------------|-------------------|------------------------------------|
| <u>NFPA</u> | Health Hazard 3 | Flammability 0 | Instability 1 | Physical and Chemical Hazards - |
| <u>HMIS</u> | Health Hazard 3 | Flammability 0 | Physical Hazard 1 | Personal Protection X |

| Prepared By | Product Stewardship |
|---------------|---------------------------|
| | 23 British American Blvd. |
| | Latham, NY 12110 |
| | 1-800-572-6501 |
| Issuing Date | 07-Aug-2013 |
| Revision Date | 07-Aug-2020 |
| Revision Note | Revision 1. |

General Disclaimer The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text. **End of Safety Data Sheet**