

1. Identification of the Substance / Preparation and of the Company / Undertaking

Product Name: Sunsan 2 Bleach © 9616-10-670
Synonyms: Sunsan2 Bleach, Liquid Bleach, Soda Bleach
Recommended Use Industrial, Manufacturing or Laboratory use.
Manufacturer
 Sunburst Chemicals, 220 W 86th St., Bloomington, MN 55420 [1-800-899-7627], sales@sunburstchemicals.com
Emergency Telephone:
 CHEMTREC (US): 1-800-424-9300

2. Hazards Identification

GHS - Classification

| | |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |
| Acute aquatic toxicity | Category 1 |
| Chronic aquatic toxicity | Category 1 |



Signal Word: Danger

Hazard Statements:

- Causes severe skin burns and eye damage
- Very toxic to aquatic life with long lasting effects

Physical Hazards

- None

Precautionary Statements:

- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Store locked up
- Wear protective gloves/protective clothing/eye protection/face protection
- 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
- Dispose of contents/container to industrial incineration plant
- Avoid release to the environment
- Dispose of contents/ container to an approved waste disposal plant

3. Composition / Information on Ingredients

Hazardous

| Chemical name | CAS No. | Weight-% | EC No |
|---------------------|-----------|----------|-----------|
| Sodium hypochlorite | 7681-52-9 | 5.25 | 231-668-3 |
| Sodium chloride | 7647-14-5 | 4.12 | 231-598-3 |
| Sodium Hydroxide | 1310-73-2 | 0.2 | 215-185-5 |

Non-Hazardous

| Chemical name | CAS No. | Weight-% | EC No |
|---------------|-----------|----------|-----------|
| Water | 7732-18-5 | Balance | 231-791-2 |

4. First Aid Measures**Description of first aid measures**

| | |
|---|--|
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |
| Most important symptoms and effects, both acute and delayed | |
| Symptoms | No information available. |
| Indication of any immediate medical attention and special treatment needed | |
| Note to physicians | Treat symptomatically. |

5. Fire-fighting Measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No information available. |
| Explosion Data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental Release Measures**Personal precautions, protective equipment and emergency procedures**

| | |
|---|---|
| Personal precautions | Ensure adequate ventilation. |
| Methods and material for containment and cleaning up | |
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |

7. Handling and Storage**Precautions for safe handling**

| | |
|---|--|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. |
| Conditions for safe storage, including any incompatibilities | |

| | |
|---------------------------|--|
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. |
|---------------------------|--|

8. Exposure Controls / Personal Protection**Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------------------|------------------------------|--|--|
| Sodium Hydroxide 1310-73-2 | Ceiling: 2 mg/m ³ | 2 mg/m ³ Ceiling 2 mg/m ³ TWA | IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³ |

Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | | | |
|------------------------|------------------|------------------------|-------------------------------|
| Physical State: | Liquid | Odor: | Pungent, Chlorine Bleach Odor |
| Appearance: | Aqueous solution | Odor Threshold: | No information available |
| Color: | Clear Yellow | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|--------------------------|----------------------------------|
| pH: | 12.4 | |
| "Salt Out" Point (°F): | | No information available |
| Melting Point/Freezing Point: | -7 / 20 | |
| Boiling Point/Boiling Range: | 102 °C / 216 | |
| Flash Point: | | No information available |
| Evaporation Rate (BuAc=1): | | No information available |
| Flammability (solid, gas): | | No information available |
| Flammability Limits in Air: | | No information available |
| Upper Flammability Limit: | | Lower Flammability Limit: |
| Vapor Pressure (mm Hg) : | 62.18 @ 55 °C | |
| Vapor density (Air =1) | | No information available |
| Specific Gravity (H₂O=1): | 1.08 | |
| Specific Gravity (2nd value): | | |
| Water Solubility: | Soluble in water | |
| Solubility(ies): | | No information available |
| Partition Coefficient (n-octanol/water) | | No information available |
| Autoignition Temperature: | | No information available |
| Decomposition Temperature: | | No information available |
| Kinematic Viscosity: | 1.10 centistokes @ 25 °C | @ 77 °F |
| Dynamic Viscosity: | | No information available |
| Oxidizing Properties: | No information available | |
| Explosive Properties: | Solid | |

9.2. Other information

| | |
|--------------------------|--------------------------|
| Softening Point: | No information available |
| Molecular Weight: | 74.45 |
| VOC Content(%): | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

10. Stability and Reactivity

| | |
|---|---|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | None known based on information supplied. |
| Incompatible Materials | None known based on information supplied. |

Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. Toxicological Information

Information on likely routes of exposure

Product Information

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. |
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | Specific test data for the substance or mixture is not available. |
| Ingestion | Specific test data for the substance or mixture is not available. |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

No information available

Acute Toxicity:

Unknown Acute toxicity No information available

| Chemical name | Oral LD ₅₀ : | Dermal LD ₅₀ : | LC ₅₀ (Lethal Concentration): |
|----------------------------------|-------------------------|---------------------------|--|
| Sodium hypochlorite 7681-52-9 | = 8.91 g/kg (Rat) | > 10000 mg/kg (Rabbit) | - |
| Sodium chloride 7647-14-5 | = 3 g/kg (Rat) | - | > 42 g/m ³ (Rat) 1 h |
| Water 7732-18-5 | > 90 mL/kg (Rat) | - | - |
| Sodium Hydroxide 1310-73-2 | 140 - 340 mg/kg (Rat) | = 1350 mg/kg (Rabbit) | - |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|----------------------------------|-------|---------|-----|------|
| Sodium hypochlorite 7681-52-9 | - | Group 3 | - | - |

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Other Adverse Effects: No information available.

Aspiration hazard No information available.

12. Ecological Information

Ecotoxicity The environmental impact of this product has not been fully investigated.

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|---------------|-------------------|------------------|----------------------------|---|
| | | | | |

| | | | | |
|----------------------------------|--|---|---|--|
| Sodium hypochlorite 7681-52-9 | 0.095: 24 h Skeletonema costatum mg/L EC50 | 0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static | - | 2.1: 96 h Daphnia magna mg/L EC50 0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static |
| Sodium chloride 7647-14-5 | - | 5560 - 6080: 96 h Lepomis macrochirus mg/L LC50 flow-through 6020 - 7070: 96 h Pimephales promelas mg/L LC50 static 12946: 96 h Lepomis macrochirus mg/L LC50 static 7050: 96 h Pimephales promelas mg/L LC50 semi-static 6420 - 6700: 96 h Pimephales promelas mg/L LC50 static 4747 - 7824: 96 h Oncorhynchus mykiss mg/L LC50 flow-through | - | 1000: 48 h Daphnia magna mg/L EC50 340.7 - 469.2: 48 h Daphnia magna mg/L EC50 Static |
| Sodium Hydroxide 1310-73-2 | - | 45.4: 96 h Oncorhynchus mykiss mg/L LC50 static | - | - |

Persistence and Degradability: No information available.
Bioaccumulation: There is no data for this product.
Other Adverse Effects: No information available.

13. Disposal Considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging Do not reuse empty containers.

14. Transport Information

DOT
Description Not DOT Regulated

15. Regulatory Information**International Inventories**

All of the components in the product are on the following Inventory lists: TSCA (United States);, Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), South Korea (KECL);, China (IECSC), Philippines (PICCS), This product contains a substance not listed on international inventories - it is for research and development use only.

| | |
|----------------------|----------|
| AICS | Complies |
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | - |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |

| Chemical name | AICS | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS |
|---------------------|--------|--------|--------|------|--------|--------|---------------------|--------|----------|---------|
| Sodium hypochlorite | Listed | Listed | Listed | - | Listed | - | (1)-237 | Listed | KE-31506 | Present |
| Sodium chloride | Listed | Listed | Listed | - | Listed | - | (1)-236 | Listed | KE-31387 | Present |
| Water | Listed | Listed | Listed | - | Listed | - | - | Listed | KE-35400 | Present |
| Sodium Hydroxide | Listed | Listed | Listed | - | Listed | - | (2)-1972 (1)-410 | Listed | KE-31487 | Listed |

Inventory Legend

AICS - Australian Inventory of Chemical Substances
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 Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

RESTRICTIONS - REACH TITLE VII No information available

US Federal Regulations**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | SARA Extremely Hazardous Substances TPQ |
|---------------------|--------------------------|------------------------------------|---|
| Sodium hypochlorite | 100 lb | 100 lb | - |
| Sodium Hydroxide | 1000 lb | - | - |

SARA 313

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 | - |
| Chronic health hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive hazard | No |

U.S. State Right-to-Know Regulations

California Proposition 65:

This product does not contain any Proposition 65 chemicals

16. Other Information

National Fire Protection Association (NFPA) Ratings



Prepared By: HSE Department
Issue Date: 19-Oct-2012
Revision Date: 10-Jan-2018
Revision Note: Reviewed and Re-issued.

Disclaimer:

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Vertex makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Vertex's control, and, therefore, users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes, and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

End of Safety Data Sheet