



HASA NEUTRALIZER

Material Safety Data Sheet

Emergency 24 Hour Telephone: **CHEMTREC 800.424.9300**

Corporate Headquarters: Hasa Inc.
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HASA NEUTRALIZER
Material Safety Data Sheet (MSDS No. 213)

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| | | |
|-------|---|---|
| 1.1 | Product Identification: | |
| 1.1.1 | Product Name: | Hasa Neutralizer |
| 1.1.2 | CAS # (Chemical Abstracts Service Registry Number): | 10102-17-7 |
| 1.1.3 | EINECS (European Inventory of Existing Commercial Substances): | 231-867-5 |
| 1.1.4 | RTECS (Registry of Toxic Effects of Chemical Substances): | WE6660000 |
| 1.1.5 | Chemical Name: | Sodium Thiosulfate Pentahydrate |
| 1.1.6 | Chemical Formula: | $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$ |
| 1.1.7 | Synonym: | Sodium hyposulfite, Hyposulphite of soda. |
| 1.2 | Recommended Uses: | To lower chlorine levels in swimming pools and spas following super chlorination. |
| 1.3 | Company Identification: | Hasa Inc. 23119 Drayton Street Saugus, California 91350 |
| 1.4 | Emergency Telephone Number: | CHEMTREC (24 Hour): 1-800-424-9300 |
| 1.5 | Non-Emergency Assistance: | 661-259-5848 (8 AM – 5 PM PST / PDT) |

SECTION 2: EMERGENCY OVERVIEW and HAZARD IDENTIFICATION

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|-------|----------------------------|--|
| 2.1 | Emergency Overview. | May cause burns and / or irritation to eyes. May irritate skin and respiratory tract. The amount of damage depends upon the contact time. Reacts with acids to form toxic and irritating sulfur dioxide gas and / or hydrogen sulfide gas. |
| 2.2 | Acute Hazard: | |
| 2.2.1 | Eye Contact: | Dust, solutions or mist may irritate or burn the eyes and cause temporary conjunctivitis. |
| 2.2.2 | Skin Contact: | Dust, solutions or mist may cause skin irritation from repeated or prolonged contact. |
| 2.2.3 | Inhalation: | Inhalation of product dust or mist may irritate respiratory tract. Contact with acids releases sulfur dioxide and / or hydrogen sulfide gas which maybe harmful or fatal if inhaled. |
| 2.2.4 | Ingestion: | Ingestion of a large quantity may cause irritation to gastrointestinal tract and purging. Relative low in acute toxicity. |
| 2.3 | Chronic Hazard: | None known on delayed effects. |

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

| Ingredient | Synonym | CAS No. | Approx. Wt.% |
|---------------------------------|---|------------|--------------|
| Sodium Thiosulfate Pentahydrate | Sodium hyposulfite; Hyposulphite of soda | 10102-17-7 | > 99% |

SECTION 4: FIRST AID MEASURES

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| 4.1 | IF IN EYES | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. |
| 4.2 | IF ON SKIN OR CLOTHING | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. |
| 4.3 | IF INHALED | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. |
| 4.4 | IF SWALLOWED | <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person. |

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: FIRE FIGHTING MEASURES

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|-----|--|---|
| 5.1 | Flammability: | Nonflammable. |
| 5.2 | Auto-Ignition Temperature: | Not applicable. |
| 5.3 | Flash Point: | Not applicable. |
| 5.4 | Flammable Limits: | Not applicable. |
| 5.5 | Extinguishing Media: | Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.. |
| 5.6 | Products of Combustion: | Sulfur dioxide, hydrogen sulfide and sodium sulfide residue. |
| 5.7 | Fire Hazards in Presence of Various Substances: | Not applicable. |
| 5.8 | Special Fire-fighting Procedures: | Use water spray to cool containers exposed to fire. Minimize exposure. Do Not breathe fumes. Contain run-off. In closed spaces, don self-contained breathing apparatus in positive pressure mode. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

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| 6.1 | Small Spill: | Promptly sweep up or shovel with minimum dusting and place in a plastic bag or an empty container with a cover. Cautiously spray residue with plenty of water. |
| 6.2 | Large Spill: | Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow evacuating through the sanitary system. Dispose of according to local and regional authority requirements. |

SECTION 7: HANDLING AND STORAGE

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|-----|------------------|---|
| 7.1 | Handling: | Do not breathe dust. Do not get in eyes, on skin, or on clothing. |
| 7.2 | Storage: | Store in a cool, dry and well-ventilated area away from incompatible materials. Keep in securely fastened containers. |

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

| | | | | | |
|-----|------------------------------|--|--|-------------------|------------------|
| 8.1 | Engineering Controls: | Provide local exhaust if dusty or misty condition exists or if there is a release of sulfur dioxide or hydrogen sulfide gas. | | | |
| 8.2 | Personal Protection: | | | | |
| | 8.2.1 | Eyes: | Chemical safety goggles. Do not wear contact lenses. | | |
| | 8.2.2 | Respiratory: | Dust respirator Be sure to use an approved/certified respirator or equivalent. | | |
| | 8.2.3 | Skin & Body: | Body covering clothes & boots. | | |
| | 8.2.4 | Hands: | Protective rubber gloves. | | |
| 8.3 | Exposure Limits: | Sodium Thiosulfate Pentahydrate | Sulfur Dioxide* | Hydrogen Sulfide* | |
| | 8.3.1 | OSHA PEL | Not established. | 5 ppm | Not established. |
| | 8.3.2 | ACGIH STEL | Not established. | 5 ppm | 15 ppm |
| | 8.3.3 | ACGIH TLV | Not established. | 2 ppm | 10 ppm |
| | | * Sulfur Dioxide may be present as a decomposition product. *Hydrogen Sulfide may be present as a decomposition product. | | | |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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|------|--|------------------------------|
| 9.1 | Physical state and Appearance: | Colorless crystalline solid. |
| 9.2 | Odor: | Odorless. |
| 9.3 | Odor Threshold: | Odorless. |
| 9.4 | Taste: | Saline. |
| 9.5 | Molecular Weight: | 248.2 g/mole |
| 9.6 | Color: | Off White. |
| 9.7 | pH (5% aqueous solution): | 6.0 – 8.4 |
| 9.8 | Boiling Point: | Not available. |
| 9.9 | Melting Point: | 48°C |
| 9.10 | Critical Temperature: | No information available |
| 9.11 | Density (g/cm³): | 1.7 – 1.75 |
| 9.12 | Bulk Density (lb/ft³): | No information available. |
| 9.13 | Decomposition Temperature: | No information available. |
| 9.14 | Vapor Pressure (mm Hg): | No information available. |
| 9.15 | Volatility: | No information available. |
| 9.16 | Water/Oil Distribution Coefficient: | No information available. |
| 9.17 | Dissociation Constant: | No information available. |
| 9.18 | Solubility in Water (@ 20°C): | 68 g/100 g water |

SECTION 10: STABILITY AND REACTIVITY

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|------|---------------------------------------|--|
| 10.1 | Stability: | Stable under normal use and storage conditions. |
| 10.2 | Instability Temperature: | No information available. |
| 10.3 | Conditions of Instability: | Incompatible materials, moisture. |
| 10.4 | Incompatibility: | Acids, oxidizing agents. |
| 10.5 | Corrosivity: | Not corrosive in presence of glass. |
| 10.6 | Special Remarks on Reactivity: | It is a strong reducing agent and can react with oxidizers. Reacts with acids to release sulfur dioxide. Sodium Thiosulfate pentahydrate dissolves in its own water of hydration; it effloresces in warm dry air. Sodium Thiosulfate pentahydrate loses water at 100° C. It is incompatible with iodine, acids, lead, mercury, and silver salts (e.g. silver nitrate), halogens. Hygroscopic; keep container tightly closed. Protect from moisture. |
| 10.7 | Hazardous Polymerization: | Will not occur. |

SECTION 11: TOXICOLOGICAL INFORMATION

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|------|---|--|
| 11.1 | Routes of Entry: | Eyes and nose. |
| 11.2 | Acute Toxicity (animals): | |
| | 11.2.1 Oral Toxicity: (LD ₅₀) | No data available. |
| | 11.2.2 Dermal Toxicity: (LD ₅₀) | No data available. |
| | 11.2.3 Eye Irritation: | No data available. |
| 11.3 | Overexposure Effects on Humans: | |
| | 11.3.1 Ocular: | Causes eye irritation. |
| | 11.3.2 Dermal: | Not irritant to intact skin. Slightly irritant on prolonged contact to abraded skin. |
| | 11.3.3 Inhalation: | May cause upper respiratory tract and mucous membrane irritation. |
| | 11.3.4 Ingestion: | Sodium Thiosulfate is an agent with a low order of toxicity. Ingestion of large doses may cause gastrointestinal irritation disturbances with nausea, vomiting, abdominal cramping, diarrhea, metabolic acidosis, and hypernatremia. It may result in a cathartic (laxative, purging) effect. May also affect respiration (cyanosis, respiratory stimulation), cardiovascular (hypotension) behavior (ataxia, convulsions) |
| 11.4 | Chronic Effects on Humans: | Prolonged or repeated skin contact may allergic dermatitis, and irritation. |
| 11.5 | Carcinogenic [Cancer Potential] Information: | |
| | 11.5.1 NTP (National Toxicological Program 6 th Annual Report on Carcinogens): | Not Listed. |
| | 11.5.2 IARC (International Agency for Research on Cancer Monographs, V. 1-100): | Not Listed. |
| | 11.5.3 Proposition 65, California only: (Safe Drinking Water and Toxic Enforcement Act of 1986): | Not Listed. |

SECTION 12: ECOLOGICAL INFORMATION

| | | |
|------|------------------------------------|---|
| 12.1 | Ecotoxicity: | <p>Very toxic to aquatic organisms.</p> <ul style="list-style-type: none"> ■ Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. <p>Wastes resulting from use of the product must be disposed of on site or at approved waste sites.</p> <ul style="list-style-type: none"> ■ Sulfide ion is very toxic to aquatic life; threshold concentration for fresh or saltwater fish is 0.5 ppm. <p>The product therefore is very toxic to aquatic life. The major decomposition product, hydrogen sulfide, is damaging to vegetation at 5 ppm for 24 hours.</p> <ul style="list-style-type: none"> ■ DO NOT discharge into sewer or waterways. |
| 12.2 | Bioaccumulation: | Bioaccumulation is not likely to occur since this material is highly soluble in water. |
| 12.3 | Biodegradation: | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| 12.4 | Toxicity of Biodegradation: | The product itself and its products of degradation are not toxic.. |

SECTION 13: DISPOSAL CONSIDERATIONS

Unused material is not RCRA hazardous waste if discarded.
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

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|------|--------------------------------|----------------|
| 14.1 | U.S. DOT Classification | Not regulated. |
|------|--------------------------------|----------------|

SECTION 15: REGULATORY INFORMATION

15.1 U.S. Regulations:

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|--------|---|---|
| 15.1.1 | OSHA HAZCOM (Hazard Communication) | This product is considered hazardous under the HAZCOM Standard (29 CFR 1910.1200) |
| 15.1.2 | OSHA PSM (Process Safety Management) | Not regulated under PSM Standard (29 CFR 1910.119) |
| 15.1.3 | EPA FIFRA (Federal Insecticide, Fungicide and Rodenticide Act) | Not regulated as a pesticide. |
| 15.1.4 | EPA EPCRA (Emergency Planning and Community Right-to-Know Act) | Not regulated. |
| 15.1.5 | EPA TSCA (Toxic Substance Control Act) | Listed on the inventory. |
| 15.1.6 | EPA RCRA (Resource Conservation and Recovery Act) | This material does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33. |
| 15.1.7 | EPA RMP (Risk Management Plan) | Not regulated. (40 CFR 68.130) |

15.2 State of California Regulations:


| | | |
|--------|---|----------------|
| 15.2.1 | Prop 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): | Not Listed. |
| 15.2.2 | CalARP (California Accidental Release Prevention): | Not regulated. |
| 15.2.3 | CDPR (California Department of Pesticide Regulation): | Not regulated. |

15.3 Canada Regulations:

| | | |
|--------|--|--|
| 15.3.1 | WHMIS (Workplace Hazardous Materials Information System): | No information. |
| 15.3.2 | DSL (Domestic Substances List) | The substance is specified on the DSL. |

15.4 International Inventory:

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|--------|---|---|
| 15.4.1 | AICS (Australian Inventory of Chemical Substances): | On inventory or in compliance with inventory. |
| 16.5.1 | KECI (Korean Existing Chemicals Inventory): | On inventory or in compliance with inventory. |
| 16.5.2 | PICCS (Philippine Inventory of Chemicals and Chemical Substances): | On inventory or in compliance with inventory. |
| 16.5.3 | IECSC (Inventory of Existing Chemical Substances in China): | On inventory or in compliance with inventory. |
| 16.5.4 | NZIoC (New Zealand Inventory of Chemicals): | On inventory or in compliance with inventory. |

| SECTION 16: OTHER INFORMATION | | |
|---|---|--|
| 16.1 | HMIS III (Hazardous Materials Identification System): | |
| 16.1.1 | HEALTH | 2 |
| 16.1.2 | FLAMMABILITY | 0 |
| 16.1.3 | PHYSICAL HAZARD | 0 |
| 16.1.4 | PERSONAL PROTECTION | See Section 8. |
| 16.2 | NFPA 704 (National Fire Protection Association): | |
| 16.2.1 | HEALTH | 2 |
| 16.2.2 | FLAMMABILITY | 0 |
| 16.2.3 | INSTABILITY | 0 |
| 16.2.4 | SPECIAL | None |
|  | | |
| 16.3 | International Fire Code / International Building Code: | No information. |
| 16.4 | ANSI (American National Standards Institute): | |
| 16.4.1 | Hazardous Industrial Chemicals - MSDS-Preparation: | Complies with ANSI Z400.1 – 2004. |
| 16.4.2 | Hazardous Industrial Chemicals - Precautionary Labeling: | Complies with ANSI Z129.1 – 2006. |
| 16.5 | GHS (Globally Harmonized System): | |
| 16.5.1 | Classification: | Lack of data. |
| 16.5.2 | Symbol: | Lack of data. |
| 16.5.3 | Signal Word: | Lack of data. |
| 16.5.4 | Hazard Statement: | Lack of data. |

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