



# Safety Data Sheet (SODIUM HYPOCHLORITE 12.5%)

## 1 – PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:**..... SODIUM HYPOCHLORITE 12.5%  
**CHEMICAL NAME/**  
**CLASS/SYNONYMS:** Bleach, Hypo, Hypochlorite, Liquid Chlorine Solution  
**PRODUCT NUMBER:** ..... SODIUM HYPOCHLORITE 12.5%  
**UN/NA NUMBER:** ..... 1791  
**CHEMICAL FAMILY:** ..... Sanitizer  
**CAS NUMBER:** ..... 7681-52-9  
**FORMULA:** NaOCl  
  
**COMPANY:**..... **JMN Specialties, Inc.**  
1100 Victory Drive – Westwego, Louisiana USA 70094  
Phone (504) 341-3749, Fax (504) 341-5868  
[www.jmnspecialties.com](http://www.jmnspecialties.com)  
**EMERGENCY PHONE:** ..... CALL CHEMTEL: Toll Free US & Canada: (800) 255-3924, Outside  
USA +01-813-248-0585.  
**DATE PREPARED:** ..... February 28, 2019

## 2 – HAZARDS IDENTIFICATION

### GHS HAZARD CLASSIFICATION:

#### Physical Hazards

**Flammable Liquids:**..... . No hazard statement

#### Health Hazards

**Acute Toxicity (Oral):** ..... . Category 3 - Toxic if swallowed, in contact with skin, inhaled

**Skin Corrosion/Irritation:** ..... . Category 1C - Causes severe skin burns and eye damage

**Serious Eye Damage/Irritation:** Category 1 - Causes severe eye damage

**Aspiration Hazard:**..... . Category 3 (respiratory tract irritation)

### WARNING LABEL ITEMS INCLUDING PRECAUTIONARY STATEMENTS:

#### Pictograms:



**SIGNAL WORD:**..... DANGER!

### GHS HAZARD AND PRECAUTIONARY STATEMENTS:

H301 H311 H331: Toxic if swallowed, in contact with skin or if inhaled

P101+102+103: If medical advice is needed, have product container or label at hand. Keep out of the reach of children. Read label before use.

P202+270+280+281: Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.



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P501: Dispose of contents/container: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**TOTAL VOC's:** No data available

### 3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER
Sodium Hypochlorite	12.5	107-21-1
Sodium Hydroxide	0.2	Conf.

### 4 – FIRST-AID MEASURES

**BREATHING (INHALATION):** Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial resuscitation. Keep person warm and at rest. Treat symptomatically and supportively. Seek medical attention immediately. Qualified medical personnel should consider administering oxygen.

**SWALLOWING (INGESTION):** Give large amounts of fresh water or milk immediately. Do not give anything by mouth if person is unconscious or otherwise unable to swallow. If vomiting occurs, keep head below hips to prevent aspiration. Treat symptomatically and supportively. Seek medical attention immediately.

**EYES:** ..... Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

**SKIN (DERMAL):**..... Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.

**NOTE TO PHYSICIAN:** ..... Pre-existing medical conditions may be aggravated by exposures affecting target organs. There are no known chronic effects. Probable mucosal damage may contraindicate the use of gastric lavage. In addition to the alkalinity of this product, the continued generation of chlorine gas after ingestion can damage further the stomach mucous, depending on the amount ingested. Consideration may be given to removal of the product from the stomach, taking care to avoid perforation of esophagus or stomach. An ounce of 1% sodium thiosulfate or milk of magnesia is helpful.



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### 5 – FIRE-FIGHTING MEASURES

**GENERAL FIRE HAZARDS:** .... Do not use Mono Ammonium Phosphate (MAP) fire extinguishers. Such use may cause explosion with release of toxic gases. On burning will emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapor or products of combustion. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Keep containers cool with water spray.

**AUTOIGNITION TEMP:** None - Water based material

**EXTINGUISHING MEDIA:** Determined by surrounding material. In case of fire, use water fog, dry chemical, CO<sub>2</sub>, or "alcohol" foam.

**SPECIAL FIRE FIGHTING UNUSUAL FIRE AND EXPLOSION HAZARDS:** ..... Containers may explode from internal pressure if confined to fire. Cool with water spray.

### 6 – ACCIDENTAL RELEASE MEASURES

**SPILL PROCEDURES:** Slippery when spilt. Begin clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Wash area down with excess water. **Deactivating Chemicals:** Sodium Sulfite, Sodium Thiosulfate and Sodium Bisulfite.

**WASTE DISPOSAL:** ..... Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**RCRA STATUS:** If discarded in its purchased form, it is not a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).

### 7 – HANDLING and STORAGE

**STORAGE:** Keep in a tightly closed container, stored in a cool, dry, ventilated area below 44°C (110°F). Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Drum must not be washed out or used for other purposes.



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**HANDLING:**..... Avoid contact with eyes, skin and clothing. Do not inhale vapors and fumes. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally. For industrial use only.

### 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

#### OCCUPATIONAL EXPOSURE LIMITS

HAZARDOUS INGREDIENT	PEL	TLV-TWA
Sodium Hypochlorite	1 ppm	1 ppm
Sodium Hydroxide	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>



#### EXPOSURE CONTROLS:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**RESPIRATORY PROTECTION:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**PROTECTIVE CLOTHING:** **Eye/face protection:** Wear chemical goggles; face shield (if splashing is possible). **Skin protection:** Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron or chemical suit and chemical resistant boots are recommended.

**ADDITIONAL MEASURES:** Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.



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### 9 – PHYSICAL / CHEMICAL PROPERTIES

**BOILING POINT:** Decomposes at 230°F (110°C)  
**FREEZING POINT:** -10°F (-23.3°C)  
**FLASHPOINT:** 230°F (110°C)  
**UPPER FLAME LIMIT (%):** ..... NA  
**LOWER FLAME LIMIT (%):** ... NA  
**VAPOR PRESSURE:** 12.1 mm Hg @ 20°C (68°F)  
**VAPOR DENSITY (AIR=1):**..... 2.61 (Air=1)  
**SPECIFIC GRAVITY:** ..... 1.20  
**pH:** ..... 10% Solution in water: 12.0 - 12.5  
**SOLUBILITY IN WATER:**..... Complete  
**VOLATILITY**  
**INCLUDING WATER:** 10.0 pounds per gallon  
**MOLECULAR WEIGHT:** ..... 74.5  
**EVAPORATION RATE:**..... < 1  
**PHYSICAL STATE:** ..... Liquid  
**COLOR:** ..... Greenish yellow liquid  
**ODOR:**..... Bland

### 10 – STABILITY and REACTIVITY

**STABILITY:** ..... Stable  
**HAZARDOUS DECOMP.:**..... Will not occur  
**INCOMPATIBILITY:** ..... Oxidizers or Oxidizing Materials.  
**HAZARDOUS REACTIONS:** .... Rate of decomposition increases with heat. May develop chlorine if mixed with acidic solutions.

### 11 – TOXICOLOGICAL INFORMATION

**IARC:** 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. **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**THRESHOLD LIMIT VALUE:** 2 mg/m<sup>3</sup>: 15 minute. (Short-term time weighted average)  
**OSHA PEL:** 1 ppm as Cl<sub>2</sub>  
**LISTED CARCINOGEN:** This product IS NOT listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA.  
**MEDICAL CONDITION**  
**AGGRAVATED:** Existing dermatitis.



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### INFORMATION ON ACUTE TOXICOLOGICAL EFFECTS

#### ORAL

**Product:**..... Corrosive. Can cause severe corrosion of and damage to the gastrointestinal tract (including mouth, throat, and esophagus). Exposure is characterized by nausea, vomiting, abdominal pain, diarrhea, bleeding, and/or tissue ulceration.

#### DERMAL

**Product:**..... Prolonged and repeated exposure to dilute solutions often causes irritation, redness, pain and drying and cracking of the skin. Human evidence has indicated that an ingredient in this product can cause skin sensitization. Depending upon the concentration and how soon after exposure the skin is washed with water, skin contact may cause burns and tissue destruction.

#### INHALATION

**Product:**..... Strong irritating to mucous membranes in the nose, throat and respiratory tract. Prolonged contact can cause chronic irritation, pulmonary edema and central nervous system depression. Repeated inhalation exposure may cause impairment of lung function and permanent lung damage.

#### REPEATED DOSE TOXICITY

**Product:**..... Based on the toxicity profile and exposure scenarios for sodium hypochlorite, EPA concludes that the risks from chronic and subchronic exposure to low levels of this Product are minimal and without consequence to human health.

#### SKIN CORROSION / IRRITATION

**Product:**..... Repeated and prolonged exposure to concentrated material may cause dermatitis or chemical burns.

#### SERIOUS EYE DAMAGE / IRRITATION

**Product:**..... Strongly irritating to eyes. Exposure to vapor can cause tearing, conjunctivitis and burning of the eyes. Eye contact may cause a corneal injury. The severity of the effects depend on the concentration and how soon after exposure the eyes are washed with water. In severe exposure cases, glaucoma, cataracts and permanent blindness may occur.

#### RESPIRATORY OR SKIN SENSITIZATION

**Product:**..... Human evidence has indicated that an ingredient in this product can cause skin sensitization.

#### MUTAGENICITY

##### IN VITRO

**Product:**..... No Data Available

##### IN VIVO

**Product:**..... Sodium Hypochlorite has been shown to produce damage to genetic material when tested in vitro. Studies in vivo have shown no evidence of mutagenic potential for this material. It is judged that the risk of genetic damage is insignificant for sodium hypochlorite because of its biological activity, lack of mutagenicity in vivo, and failure to produce carcinogenic response.

#### Specified Substance(s)

#### Information as provided by manufacturer

Sodium Hypochlorite

#### CARCINOGENICITY

**Product:**..... Based on available data the classification criteria are not met. Not classified as hazardous.

#### REPRODUCTIVE TOXICITY

**Product:**..... Based on available data the classification criteria are not met. Not classified as hazardous.



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### SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

**Product:** **GENERAL:** This product contains highly alkaline ingredients. **INHALATION:** Exposure to vapor, mist or liquid can cause mild to severe irritation to the respiratory tract, including chemical burns. Severe exposures could result in chemical pneumonia. **EYES:** Contact can cause severe damage including burns and blindness. The severity of the effects depend on concentration and how soon after exposure the eyes are washed. **SKIN:** Brief contact may cause slight to mild irritation with itching and local redness. Prolonged contact may cause more severe irritation, with discomfort or pain, local redness and swelling and possible tissue damage. **INGESTION:** Severe irritant. May cause severe burns of the mucous membranes of the mouth, esophagus, and stomach.

### SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE

**Product:**..... The effects of long-term, low-level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposure. This product may aggravate existing eye, skin, and respiratory conditions.

### ASPIRATION HAZARD

**Product:**..... Droplets of the product aspirated into the lungs through ingestion or vomiting may cause chemical pneumonia.

### OTHER ADVERSE EFFECTS

**Product:** Acute Toxicity: Oral Toxicity (LD<sub>50</sub>): 3-5 g/kg (rat). Dermal Toxicity (LD<sub>50</sub>): >2 g/kg (rabbit). Primary Eye Irritation: Corrosive. Primary Skin Irritation: Corrosive. Inhalation Toxicity (LC<sub>50</sub>): No data available. Chronic Effects (Human Risk Assessment): Based on the toxicity profile and exposure scenarios for sodium hypochlorite, EPA concludes that the risks from chronic and subchronic exposure to low levels of these pesticides are minimal and without consequence to human health.

## 12 – ECOLOGICAL INFORMATION

### ACUTE TOXICITY

#### FISH

**Product:** LC<sub>50</sub> = 0.141 - 0.193 mg/l/96 hr, flow through bioassay (pH: 8), Pink Salmon (oncorhynchus gorbusha) Fat Head Minnow (pimephales promelas) LC<sub>50</sub> = 0.22 - 0.62 mg/l/96 hr, flow through bioassay (pH: 7)

#### AQUATIC INVERTEBRATES

**Product:** Water Flea (daphnia magna) LC<sub>50</sub> = 2.1 mg/l/96 hr. Fresh Water Shrimp (gammarus fasciatus) LC<sub>50</sub> = 0.4 mg/l/96 hr

### CHRONIC TOXICITY

#### FISH

**Product:**..... This material has exhibited moderate toxicity to aquatic organisms.

#### AQUATIC INVERTEBRATES

**Product:**..... This material has exhibited moderate toxicity to aquatic organisms.

#### TOXICITY TO AQUATIC PLANTS

**Product:**..... Toxic to algae. Estimated based on individual component values.

### PERSISTENCE AND DEGRADABILITY

#### BIODEGRADATION

**Product:**..... The methods for determining the biological degradability are not applicable to predominately inorganic substances.

#### BIOLOGICAL OXYGEN DEMAND

**Product:** Not applicable



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### CHEMICAL OXYGEN DEMAND

**Product:** Not applicable

### BOD / COD RATIO

**Product:**..... No data available

### BIOACCUMULATIVE POTENTIAL

**Product:**..... Potential to bioaccumulate is low.

### MOBILITY IN SOIL

**Product:**..... Expected to partition to water.

### RESULTS OF PBT AND mPvB ASSESSMENT

**Product:**..... Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria. Not fulfilling vPvB (very persistent, very bioaccumulative) criteria.

### OTHER ADVERSE EFFECTS

**Product:** ..... Not expected to cause long-term adverse effects in the aquatic environment.

## 13 –DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** ..... Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 14 – TRANSPORTATION INFORMATION

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*



**UN/NA NUMBER:** ..... 1791

**PROPER SHIPPING NAME:** ..... Hypochlorite Solutions

**HAZARD CLASS:**..... 8

**PACKAGING GROUP :**..... III

**LETTER:**..... C (Corrosive substances)

**ENVIRONMENTAL HAZARD:** Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers. May be an aesthetic nuisance due to color. Mammals and birds, exposed wildlife would be subject to skin irritation and burns due to the corrosive nature of this material.

**REPORTABLE QUANTITY:** ..... 100 lbs. (45.36 kg)





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### 15 - REGULATIONS

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System. This SDS complies with 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD). **IMPORTANT:** Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

#### EPA SRA Title III Chemical Listings:

**TSCA STATUS:**..... This product is listed on the TSCA inventory. If this product is a blend, all ingredients in the product are listed on the TSCA Inventory List.  
Any impurities present in this product are exempt from listing.

**SECTION 302:**..... None

**SECTION 304:**..... None

**SECTION 312:**..... Yes

**SARA SECTION 313:**..... None

**ACUTE:**..... Yes (Eyes)

**CHRONIC:**..... Yes

**FIRE:**..... No

**PRESSURE:**..... No

**REACTIVE:**..... No

**CLEAN WATER ACT:**..... None

#### **IMDG – International Marine Dangerous Goods Code**

UN1797, Hypochlorite Solutions, 8, PGIII. EmS F-A, S-B. Marine Pollutant: Yes.

#### **IATA**

UN1797, Hypochlorite Solutions, 8, PGIII.

**DEA Chemical Trafficking Act:**.. No



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### 16 – OTHER INFORMATION

#### HMIS\*

HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	H

*\*HMIS®HAZARD INDEX: 0=Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard.*

*HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS and product label must be considered.*

ND = No Data, NA = Not Applicable/Not Available, ≤ = Less than or equal to, ≥ = Greater than or equal to

**REVISION STATEMENT:** Changes have been made throughout this Safety Data Sheet (SDS). Please read the entire document. Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) by the Company Health and Risk Assessment Unit.

#### DISCLAIMER:

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving this Safety Data Sheet (SDS) will make their own determination as to its suitability for their intended purposes prior to use. Since the product is within the exclusive control of the user, it is the user's obligation to determine the conditions of safe use of this product. Such conditions should comply with all Federal and State Regulations concerning the Product. It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. **NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.**

\*\*\*This is the last page of this SDS\*\*\*