

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	PVS N Sodium Hypochlorite 12.5% Solution
Synonyms	Bleach, Sodium hypochlorite***
UN/ID No.	UN1791***
Item #	11934
Revision Date	Nov-04-2021
Safety Data Sheet	1522
Recommended Use	Antimicrobial***
Uses advised against	IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PESTICIDE IN A MANNER INCONSISTENT WITH ITS LABELING. SEE THE FULL LABEL FOR DETAILS.

Company Name

PVS-Nolwood Chemicals, Inc
10900 Harper Ave.
Detroit, MI 48213
(800) 284-9735

24 Hour Emergency Phone Number CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Emergency Overview

DANGER***

Hazard statements

Physical hazards

Precautionary Statements

Hazards to humans and domestic animals:***

DANGER

CORROSIVE, May cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin or clothing. Wear safety glasses or goggles and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Avoid breathing vapors.***

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

STRONG OXIDIZING AGENT: Mix only with water according to label directions. Mixing this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine feces, etc.) will release chlorine gas, which is irritating to eyes, lungs, and mucous membranes. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.



Precautionary statements

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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***

Response

- Immediately call a POISON CENTER or doctor/physician
- Specific treatment (see section 4 on this Safety Data Sheet)***

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): Remove/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 Immediately call a POISON CENTER or doctor/physician***

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting***

Storage

- Store locked up***

Disposal

- Dispose of contents/container to an approved waste disposal plant***

Other Information

Other hazards

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	EC No.	Weight-% *
Sodium hypochlorite	7681-52-9	231-668-3***	12.5

4. FIRST AID MEASURES

General advice

- Keep out of reach of children***

Eye contact

- **IF IN EYES**
- Hold eyes 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 eyes. Call a Poison Control Center or doctor for treatment advice.***

Skin contact

- **IF ON SKIN OR CLOTHING**
- 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.***

Inhalation

- Remove to fresh air
- Call a physician or poison control center immediately
- If not breathing, give artificial respiration
- If breathing is labored, administer oxygen***

Ingestion

- **IF SWALLOWED**
- Call a Poison Control Center or doctor immediately for treatment advice. Have person drink large amounts of water. Do not induce vomiting unless told to do so by the Poison Control Center or a doctor. Do not give anything by mouth to an unconscious person. Have the product container or label with you when calling a Poison Control Center or doctor, or going for treatment. For emergency information on product, Call your poison control center at 1-800-222-1222.***

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Note to physician

- **NOTE TO PHYSICIAN:**
- Probable mucosal damage may contraindicate the use of gastric lavage***

Self-protection for first aid personnel

- Use personal protective equipment as required
- Avoid contact with skin, eyes or clothing***

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

- Dry chemical, CO₂, water spray or alcohol-resistant foam
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable extinguishing media

- Caution: Use of water spray when fighting fire may be inefficient
- Do not use a solid water stream as it may scatter and spread fire

Specific hazards arising from the chemical

- The product causes burns of eyes, skin and mucous membranes
- Thermal decomposition can lead to release of irritating and toxic gases and vapors
- In the event of fire and/or explosion, do not breathe fumes***

Protective equipment and precautions for firefighters

- Wear a self-contained breathing apparatus and chemical protective clothing

Flammable properties

- No information available

Explosive properties

- No information available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

- Use personal protective equipment as required
- Evacuate personnel to safe areas
- Avoid contact with skin, eyes or clothing
- Keep people away from and upwind of spill/leak***

Environmental precautions

- For small spills, absorb material with clay absorbent or other compatible material. Dispose of the waste material according to local, state and governmental requirements.
- For large spills, contain the material using barriers of absorbent pigs, clay absorbent or earth dams.

Methods for cleaning up

- Soak up with inert absorbent material
- Clean contaminated surface thoroughly
- Dike far ahead of liquid spill for later disposal
- Take up mechanically, placing in appropriate containers for disposal
- Prevent product from entering drains
- Dam up
- After cleaning, flush away traces with water***

Other Information

- No information available

7. HANDLING AND STORAGE

Advice on safe handling

- Use personal protective equipment as required
- Ensure adequate ventilation, especially in confined areas
- Avoid contact with skin, eyes or clothing
- In case of insufficient ventilation, wear suitable respiratory equipment
- Use only with adequate ventilation and in closed systems***

Storage Conditions

- **PESTICIDE STORAGE:** Do not contaminate water, food or feed by storage, disposal, or cleaning of equipment. Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water.
- **PESTICIDE DISPOSAL:** Product or Rinsate that cannot be used must be diluted with water before disposal in a sanitary sewer.
- **CONTAINER HANDLING: REFILLABLE CONTAINER:** Refill this container with sodium hypochlorite, only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container.

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Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate the container vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. NON-REFILLABLE CONTAINER, 5 GALLONS OR LESS: Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill container ¼ full with water and recap. Shake container for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.***

Incompatible materials

Incompatible with strong acids and bases, Incompatible with oxidizing agents***

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory protection

- A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.

Eye/Face protection

- Tight sealing safety goggles
- Face protection shield***

Skin and body protection

- Wear suitable protective clothing
- Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact

General Hygiene Considerations

- When using do not eat, drink or smoke
- Wash contaminated clothing before reuse
- Keep away from food, drink and animal feeding stuffs
- Contaminated work clothing should not be allowed out of the workplace
- Regular cleaning of equipment, work area and clothing is recommended
- Avoid contact with skin, eyes or clothing
- Take off all contaminated clothing and wash it before reuse
- Wear suitable gloves and eye/face protection***

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	colorless or slight yellow, yellow green
Odor	Chlorine
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	12	10% w/w with D.I. water***
Melting point/Freezing Point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit (%)	No information available	
Lower flammability limit (%)	No information available	

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Vapor pressure	1.6	***
Vapor density	No information available	
Specific Gravity	1.21	***
Water solubility	Miscible in water	***
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point °C	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	10.0914 Pounds per gallon (lb/gal)

10. STABILITY AND REACTIVITY

Stability	• Stable under recommended storage conditions
Conditions to avoid	• Exposure to air or moisture over prolonged periods***
Incompatible materials	Incompatible with strong acids and bases, Incompatible with oxidizing agents***
Hazardous Decomposition Products	• Thermal decomposition can lead to release of irritating and toxic gases and vapors***
Possibility of Hazardous Reactions	• None under normal processing and storage

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Principle Routes of Exposure	Inhalation, Skin contact, Eye contact***
Inhalation	May cause irritation of respiratory tract. Avoid breathing vapors or mists.
Ingestion	May be harmful if swallowed.
Skin contact	May cause skin irritation and/or dermatitis.
Eye contact	Contact with eyes may cause irritation.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hypochlorite 7681-52-9	= 8.91 g/kg (Rat)***	> 10000 mg/kg (Rabbit)***	

Information on toxicological effects

Symptoms	No information available
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).***

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9		Group 3***		

IARC (International Agency for Research on Cancer)
Not classifiable as a human carcinogen***

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Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic toxicity	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.***
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	0% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document	***
Oral LD50	71,280.00
Dermal LD50	80,080.00

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.***

Ecotoxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects
0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium hypochlorite 7681-52-9		0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static***	0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static***

<u>Persistence and degradability</u>	No information available
<u>Bioaccumulation</u>	No information available

<u>Other adverse effects</u>	No information available
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13. DISPOSAL CONSIDERATIONS

Disposal of wastes	• Dispose of in accordance with federal, state and local regulations • Dispose of hazardous waste in a RCRA licensed facility
Contaminated packaging	• Do not reuse container***
US EPA Waste Number	• D002***

14. TRANSPORT INFORMATION

<u>DOT</u>	***
Proper shipping name	HYPOCHLORITE SOLUTIONS***
Hazard Class	8***
UN/ID No.	UN1791***
Packing Group	III***
RQ (lbs)(dry)	(Sodium hypochlorite: RQ (kg)= 45.40)***
RQ as is (lbs)(wet)	800
Description	UN1791, HYPOCHLORITE SOLUTIONS, 8, III, Marine pollutant (Sodium hypochlorite)***
Special Provisions	386, IB3, N34, T4, TP2, TP24***
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to DOT***

PVS N Sodium Hypochlorite 12.5% Solution**Emergency Response Guide Number** 154*****Transport Canada**

UN/ID No. UN1791***
Proper shipping name HYPOCHLORITE SOLUTION***
Hazard Class 8***
Packing Group III***
Description UN1791, HYPOCHLORITE SOLUTION, 8, III***

IATA

UN/ID No. UN1791***
Proper shipping name Hypochlorite solution***
Hazard Class 8***
Packing Group III***
ERG Code 8L***
Special Provisions A3, A803***

IMDG

UN/ID No. UN1791***
Proper shipping name HYPOCHLORITE SOLUTION***
Hazard Class 8***
Packing Group III***
EmS-No. F-A, S-B***
Special Provisions 223***
Marine pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO***

15. REGULATORY INFORMATION**US Federal Regulations****SARA 311/312 Hazard Categories**

Acute health hazard Yes***
Chronic Health Hazard Yes***
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

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

U.S. - TSCA (Toxic Substances Control Act) - Section 5(a)(2) - Chemicals with Significant New Use Rules (SNURs)**CWA (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 7681-52-9	100 lb***			X***

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	CERCLA/SARA RQ	RQ (lbs)(dry)
Sodium hypochlorite 7681-52-9	100 lb***		RQ 100 lb final RQ RQ 45.4 kg final RQ***

Canada**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR

WHMIS Classification

Non-controlled

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US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5			X***
Sodium hypochlorite 7681-52-9	X***	X***	X***

U.S. EPA Label Information

EPA Pesticide Registration Number EPA Est. No. 62255-MI-001

EPA Pesticide Label EPA Reg. No. 62255-20001

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	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 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

AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 3***	Flammability 0	Instability 1	Physical and Chemical Properties OX
<u>HMIS</u>	Health hazards 3***	Flammability 0	Physical hazards 1	Personal protection D

Item #	11934
Safety Data Sheet	1522
Revision Date	Nov-04-2021
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Version	2
Revision Note	*** Updated value on SDS.

Disclaimer

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consideration, and investigation as required by federal hazardous products act and related legislation.

End of Safety Data Sheet