SAFETY DATA SHEET

Revision date: 2/20/2025 Supersedes: Not applicable Version: 1

1. Identification

Product Identifier

Product name: Zaal Sani 12

(sodium hypochlorite 12%)

Intended use of the product

Use of the substance/mixture: Industrial & Institutional Cleaning

Details of the supplier of the safety data sheet

Gemini Packaging Ltd., 150-12071 Jacobson Way, Richmond, BC, Canada V6W 1L5

1-604-278-3455

Emergency telephone number 613-996-6666 (Canutec 24 hours)

2. Hazard Identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standards (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1 B
Serious eye damage/eye irritation	Category 1
Corrosion to metal	Category 1

GHS label elements including precautionary statements

Emergency Overview

Signal word		**Danger**			
Hazard statements May intensify fire; oxidizer Harmful if swallowed Causes severe skin burns and eye damage					
Appearance	Clear, greenish yellow	Physical State	Liquid	Odor	Chlorine

Precautionary statements – Prevention

Wash hands and any exposed skin thoroughly after handling.

Wear protective clothing, protective gloves, eye protection and face protection.

Keep only in original packaging.

Do not breathe vapor, fumes or mist.

Avoid release to the environment.

Precautionary statements – Response

Eyes

IF IN EYS: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists. Get medical advice/attention.

Skin

If skin irritation occurs, get medical advice/attention.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

Precautionary statement – Storage

Store locked up.

Precautionary statement – Disposal

Contains chlorine bleach and caustic soda. Dispose of contents/container in accordance with all federal, provincial and/or local regulations including the Canadian Environment Protection Act.

Hazards not otherwise classified (HNOC)

The following medical conditions may be aggravated by exposure to high concentrations of vapor or mist: heart conditions or chronic respiratory problems such as asthma, emphysema or obstructive lung disease.

Unknown toxicity

None known.

Other information

None Known.

Interaction with other chemicals

Reacts with other household chemicals such as products containing hydrochloric acid to produce hazardous gases, such as chlorine.

3. Composition/Information on ingredients

Chemical Name	CAS No.	Wt %	GHS-US classification
Water	7732-18-5	87 - 89	Not classified
Sodium hypochlorite	7681-52-9	11 – 13	Skin Corr. 1B, H314 Eye Dam. 1, H318

4. First Aid Measures

First Aid Measures

General Advice	Show this safety data sheet to the doctor in attendance.
Inhalation	If symptoms of exposure develop, remove to fresh air. Seek medical attention if symptoms persist.
Skin Contac	Remove contaminated clothing. Wash all affected and exposed areas with soap and water. If irritation or redness persists, seek medical attention.

Eye Contact	Expose eyes should be immediately flushed with copious amounts of water using a steady stream for a minimum of 15 minutes. Do not rub affected area. If irritation, pain, swelling or tearing persistent, seek medical attention.
Ingestion	If swallowed, get medical attention by call in Poison Control Center or hospital immediately. Have person sip a glassful of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor.
Protection of first-aiders	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most important Symptoms & Effects	Stinging and irritation of eyes.

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.

5. Firefighting Measures

Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Alcohol foam, carbon dioxide, dry chemicals and water fog.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Container may melt and leak in heat of fire.

It is an aqueous solution and does not sustain combustion. Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-contained breathing apparatus.

Explosive 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 Procedure

Personal Precautions	Remove all sources of ignition. Avoid contact with eyes, skin and clothing. Use personal protective equipment as required.
Other information	Refer to protective measures listed in Sections 7 and 8

Environmental Precautions

Environmental Precautions	See Section 12 for ecological information

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	Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material. Dike large spills.

7. Handling & Storage

Precautions for Safe Handling

Handling	KEEP OUT OF REACH OF CHILDREN AND PETS. Use only as directed. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Keep away from heat and sources of ignition.

Conditions for Safe Storage, Including any Incompatibilities

Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Do not freeze. Away from direct sunlight.
Incompatible Products	Stable under normal conditions.

8. Exposure Controls / Personal Protection

Control Parameters

Exposure Guidelines:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hypochlorite 7681-52-9	2 mg/m^3	2 mg/m^3	-

ACGIH TLV. American Conference of Governmental Industrial Hygienists – Threshold Limit Value.

OSHA PEL: Occupational Safety and Health Administration – Permissible Exposure Limits

NIOSH IDLH: National Institute of Occupational Safety and Health - Immediately Dangerous to Life or Health.

Appropriate Engineering Controls

Engineering Measures	Showers, eyewash stations, ventilation systems

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection:	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear protective gloves and protective clothing.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced. NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene Measure	Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Use only with adequate ventilation.

9. Physical & Chemical Properties

Physical and Chemical Properties

Physical States	Liquid		
Appearance	Clear	**Odor**	Strong chlorine odor
Color	Greenish yellow	**Odor Threshold**	No information available

Property	**Values**	**Remarks/Methods**
pH	**11.5 – 12.5**	None known
Melting/freezing point	Non data available	None known
Boiling point/boiling range	Non data available	None known
Flash point	Non data available	None known
Evaporation rate	Non data available	None known
Flammability (solid, gas)	Non data available	None known
Flammability limits in Air		
Upper flammability limit	Non data available	None known
Lower flammability limit	Non data available	None known
Vapor pressure	Non data available	None known
Vapor density	Non data available	None known
Specific Gravity	1.1 - 1.2	None known
Water solubility	soluble in water	None known
Solubility in other solvents	Non data available	None known
Partition coefficient: n-octanol/water	Non data available	None known
Autoignition temperature	Non data available	None known
Decomposition temperature	Non data available	None known
Kinematic viscosity	Non data available	None known
Dynamic viscosity	Non data available	None known
Explosive properties	Not explosive	None known
Oxidizing properties	Non data available	None known
Other information		
Softening point	Non data available	None known
VOC content (%)	**0**	None known
Particle size	Non data available	None known

Particle size distribution	Non data available	None known

10. Stability & Reactivity

Reactivity

Reacts with other industrial and institutional, and household chemicals such as products containing hydrochloric acid to produce hazardous gases including chlorine gas.

May be corrosive to metals.

Chemical Stability

Sodium hypochlorite solutions are unstable and will decompose over time. Sodium hypochlorite's decomposition rate is an exponential function of temperature. Each increase of 10℃ will increase the degradation rate by a factor of 2 to 4. Exposure to ultraviolet light (sunlight) will accelerate the degradation of sodium hypochlorite.

Possibility of Hazardous Reaction

None under normal processing. Reacts with acids to form hypochlorous acid a powerful oxidizing agent, which degrades into toxic chlorine gas.

Conditions to Avoid

Do not heat. Do not freeze.

Incompatible Materials

Acids, such as sulfuric, nitric, hydrochloric, phosphoric, flurosilicic (HFSA), sulfonic, acetic, citric, oxalic and formic.

Oxidizing agents, such as oxygen, hydrogen peroxide, sulfuric and nitric acids and permanganates.

Reducing agents, such as hydrogen, sodium borohydride, sulfur dioxide, thisosulfates, hydrazine, phosphites, carbon and oxalic, formic and ascorbic acid.

Organic material such as wood, paper, gasoline, diesel, solvents and some glycol based heat transfer fluids.

Metals such as aluminum, steel and brass.

Hazardous Decomposition Products

Chlorine, sodium chlorate.

11. Toxicological Information

Information on likely routes of exposure

Product information

Inhalation	Exposure to vapor or mist may irritate respiratory tract.
Eye Contact	Cause eye irritation, redness and pain. May cause burns and possible damage to vision.
Ingestion	Acute exposure may lead to burning of the mount and throat, abdominal cramps, nausea, vomiting, diarrhea, shock. May lead to convulsions, coma and even death. Ingestion may cause irritation to mucous membranes and gastrointestinal tract, nausea, vomiting and diarrhea.

Component Information

Chemical Name	LD_{50} Oral	LD_{50} Dermal	LC_{50} Inhalation
Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes.

Delayed and immediate effects as well as 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
	-	Group 3	-	-

IARC (International Agency for Research on Cancer)

Group 3 – Not Classifiable as to Carcinogenicity in Humans)

Reproductive Toxicity

STOT – single exposure No information available.

STOT – repeated exposure	No information available.
Chronic Toxicity	No information available.
Target Organ Effects	No information available.
Aspiration hazard	Prolonged or repeated overexposure may cause lung damage.

Numerical measures of toxicity – Product Information

The following values are calculated based on chapter 3.1 of the GHS document Not applicable

12. Ecological Information

Ecotoxicity	Toxic to aquatic life with long lasting effects.
Persistence and Degradability	The domestic substance list categorizes it as non-persistent.
Bioaccumulation	The domestic substance list categorizes it as non-bioaccumulation.
Other adverse effects	The domestic substance list categorizes it as inherently toxic to aquatic organisms.

13. Disposal Considerations

Disposal methods

Dispose of in accordance with all applicable federal, provincial, and local regulations including the Canadian Environmental Protection Act.

Contaminated packaging

Do not reuse empty containers. Do not remove labels, follow label warnings even after the container is empty. Empty containers should be recycled or disposed of at an approved waste handling facility.

14. Transportation Information

Land transport

US DOT & Canada TDG surface transportation

UN-Number	UN 1791
Hazard Class	8

Packaging Group	III
Description	HYPOCHLORITE SOLUTION

Sea Transport

IMDG / IMO

UN-Number	UN 1791
Packaging group	III
Proper shipping names	HYPOCHLORITE SOLUTION
Class	8
EMs No.	None
Marine Pollutant	Listed as a marine pollutant under Canadian TDG Regulations, schedule III.

Air Transport

ICAO / IATA

UN-Number	UN 1791
Proper shipping names	HYPOCHLORITE SOLUTION
Hazard Class	8
Packaging Group	III

15. Regulatory Information

Chemical Inventories

TSCA	All components of this product are either on the US TSCA Inventory or otherwise exempt from listing.
DSL/NDSL	All components are on the DSO or NDSL.

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

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	No
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

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

EPA Statement

Not applicable.

US State Regulations

California Proposition 65

This product does not contain any chemicals to State of California to cause cancer, birth defects or any other reproductive harm.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois

International Regulations

Canada

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

HMIS Hazard Class Not applicable

WHMIS Classification: Class E – Corrosive material

16. Other Information

NFPA

Health Hazard	2	Flammability	0	Instability	1	Physical & Chemical Hazard	2

HMIS

Health Hazard	2	Flammability	0	Physical Hazards	2	Personal Protection	C

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Revision Date New

Revision Note New

General Disclaimer

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End of Safety Data Sheet