SAFETY DATA SHEET

SODIUM HYPOCHLORITE NaCIO 10%

SDS No. 001-6

Name and address of manufacturer:
VEDAN VIETNAM ENTERPRISE CORP., LTD.
National Road 51, Hamlet 1A, Phuoc Thai village, Long Thanh District, Dong Nai Province, Vietnam Tel: (+84)251-3825111,
Free Hotline: (+84)1800.599.902
Contact address in case of emergency: VEDAN VIETNAM ENTERPRISE CORP., LTD. Tel: (+84)251-3825111, Free Hotline: (+84)1800.599.902

2. COMPOSITION/INFORMATION ON INGREDIENTS

Common name of the substance	CAS number	Chemical formula	Content (% by weight)
Sodium Hypochlorite	7681-52-9	NaClO	10% ± 2%

3. HAZARDS IDENTIFICATION

a) Rate of dangerous classification (by duly available data of the nations, organizations of testing. For example: EU, USA, OSHA...):

Chemicals corrosive to metal class 1

Causes skin burning

b) Precautionary statements

- Can cause burn if exposing to
- Attention to handling and storage:

Avoid substance contact.

Tightly closed containers. Protected from light.

Requirements for storage rooms and containers: No metal containers.

Personal protective equipment should be selected suitably.







Corrosive substance

Toxic to the environment

Stimulant

- c) Storage instructions: Store at dry and cool place. Keep far from fire and explosion substances.
- **d) Instructions for use:** Used in industrial textile bleaching, disinfection in water treatment and environmental sanitation.

4. FIRST-AID MEASURES

a) Measures relevant to the route of exposure:

- Accident in case of eye exposure (splashed, touched on the eyes): Open eyelids and wash of gently with plenty of water for at least 10 minutes. Immediately take to eye specialist.
- Accident in case of skin exposure (touched on skin): wash off with plenty of water. Wash with polyethylene glycol 400. Immediately remove contaminated clothing.
- Accident in case of respiration exposure (breathing hazardous chemicals under form of vapor, gas): Fresh air. Take to doctor
- Accident in case of ingestion exposure (eating, drinking, swallowing chemicals): let victim drink plenty of water (if necessary several liters), avoid vomiting (risk of perforation). Take to doctor and ask doctor to wash the stomach.

b) Most important symptoms/effects, acute and delayed:

- Accident in case of eye exposure: Burns. Risk of blindness!
- Accident in case of skinexposure: Burns.
- Accident in case of respiration exposure: Irritations of the mucous membranes, coughing, and dyspnoea.
- Accident in case of ingestion exposure: Burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach.

c) Indication of immediate medical attention and special treatment needed

No data available.

5. FIRE-FIGHTING MEASURES

a) Suitable extinguishing media

Using all available means for extinguishing a fire

Cool container with spray water from a save distance. Contain escaping vapours with water.

b) Toxic substances emitted from fires

Ambient fire may liberate hazardous vapours. The following may develop in event of fire: chlorine,

hydrochloric acid.

c) Special protective equipment and precautions for fire fighting.

Suitable extinguishing media: In adaption to materials stored in the immediate neighbourhood. Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

a) Personal protective equipment and emergency procedures

Comply with all relevant local and international regulations. Avoid contact with spilled or released material. Isolate hazardous areas and do not allow those who are not assigned or not protected in this area. Stand in area to a wind driven and avoid the low areas. Prevent leakage if possible and do not cause hazard. Remove all sources of ignition in the surrounding area. Use absorbable materials (product absorption or fire fighting water level) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, soil, or other appropriate barriers. Try to disperse the vapor or direct its flow to a safe location. Inform the local authorities if the spill is not controlled.

b) Environmental precautions

Leakage can cause pollution. Precautions should be taken to prevent from spreading or entering drains

c) Methods and materials for containment and cleaning up

The remaining substance after a spill / leak is neutralized by diluted acid. The remaining corrosive substance is absorbed by soil, sand / other inert material. Then collect them in suitable containers for disposal. At the same time, ventilation is equipped to control the evaporation and dispersion of chemicals in the work area.

7. HANDLING AND STORAGE

a) Measures and requirements for safe handling (e.g., ventilation, only using in closed systems, using explosion-proof electrical equipment, internal transport, etc.):

Must have adequate and appropriate personal protective equipment

- **b) Measures and requirements for safe storage** (e.g., temperature, arrangement, limits to sources of explosion and avoidance of storing some chemicals together, etc.):
- Store at dry and cool place. Keep far from fire and explosion substances.
- Tightly closed. Protected from light.
- May decompose forming gaseous products, especially when stored over long periods. Close containers in such a way to enable internal pressure to escape (e.g. excess pressure valve).
- Do not put organic matters (straw, bark cells, sawdust, paper), oxidatives, flammables and explosives in the same stock with a chemical.
- Requirements for storage rooms and containers: No metal containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

a) Control parameters (e.g., occupational exposure limit values or biological limit values)

No information

b) Appropriate engineering controls

Protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective equipment to chemicals should be ascertained with the respective supplier.

c) Individual protection measures and personal protective equipment

- Means of individual protection as working:

Eye protection: Use safety goggles.

Body protection: Suitable protective clothing.

Hand protection: Chemical-Resistant Gloves.

Foot protection: Chemical resistant shoes or boots.

- Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES				
Physical state: Liquid	Boil point (⁰ C): No information			
Color: Yellow	Melting point (⁰ C): No information			
Particular odour: Characteristic	Burning point (⁰ C) (Flash point) by determination method: No information			
Vapor pressure (mm Hg) at standard temperature, pressure: No information	Self-ignition temperature (⁰ C): No information			
Gas proportion (air = 1) at standard temperature, pressure: No information	Above limit of concentration of fire, explosion (% of mixture with air): No information			
Solubility in water: Solubility in water (20 °C)	Below limit of concentration of fire, explosion (% of mixture with air): No information			
pH value (at 20 °C): 12 - 13	Vapor percentage: No information			
Density (kg/m ³): No information	Other property if any: No information			

10. CHEMICAL STABILITY AND REACTIVITY

a) Possibility of reactions

Reacts with incompatible materials.

b) Stability (heat resistance, sensitivity to the effects of friction, shock, etc.)

Easily decomposed under the effect of light and temperature, the higher the temperature the faster the decomposition rate.

c) Dangerous reactions (corrosion, fire, explosion...)

Skin corrosion, reaction with acids, metals and metal salts.

d) Conditions to avoid (Ex: electrostatic, vibration, shaking ...)

Light and heat source.

- e) Incompatible materials: Acids, metals and metal salts.
- **f**) **Decomposition reaction and products of the decomposition reaction:** When heated will be decomposed to produce sodium chlorate and sodium chloride.

11. TOXICOLOGICAL INFORMATION

- Accident in case of eye exposure: Burns. Risk of blindness!
- Accident in case of skinexposure: Burns.
- Accident in case of respiration exposure: Irritations of the mucous membranes, coughing, and dyspnoea.
- Accident in case of ingestion exposure: Burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach.
- Further data: The product should be handled with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION

a) Ecotoxicity (aquatic and terrestrial):

Kind of creature	Result
Fish and plankton	Harmful effect due to pH shift.

b) Persistence and degradability: No data available.

c) Bioaccumulative potential: No data available.

d) Mobility in soil: No data available.

đ) Other adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

a) Information providing destruction (information of law):

Product:

- There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations.
- Expired or deteriorated chemicals must be disposed of, and their destruction must comply with current regulations.

Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

- b) Dangerous classification of waste: No information.
- c) **Disposal measures** (including contaminated products and packing material): Contact the authorities to handle.
- d) Product of the process of destruction, treatment measures: No information.

14. TRANSPORT INFORMATION

a) UN number: 1791

- b) Type, group of dangerous goods: 8
- c) Packing standard: Sodium hypochlorite solution is contained in specialized non-metal can or tank and transport by trucks.
- d) Special warnings for user attention and compliance during shipping:
- Do not transport dangerous chemicals to people, livestock and other goods.
- The on-road transport means owners do not stop vehicles parked in public places, as terms.

15. REGULATORY INFORMATION

Shall comply with:

- Chemical Law No. 06/2007 / QH12 dated 21 November 2007.
- Decree No. 113/2017/ND-CP specifying and providing guidelines for implementation of certain articles of the law on chemicals.
- Circular No. 32/2017 / TT-BCT dated December 28, 2017 specifying and guiding the implementation of certain articles of the law on chemicals No. 06/2007 / QH12 and Decree No. 113/2017 / ND-CP.
- Decree 104/2009/ND-CP of November 09, 2009, providing for the list of dangerous goods and the transport of dangerous goods by road motor vehicles.
- Circular No. 09/2016 / TT-BKHCN dated June 9, 2016 of the Ministry of Science and Technology stipulates the order and procedures for granting transport permission of dangerous goods, which are oxidizing substances and organic oxides (Class 5) and corrosive substances (Class 8) by road motor vehicles, railway and inland water transport.
- Labeling contents under the guidance of Decree No. 43/2017/NĐ-CP about labelling.
- And other relevant legal documents.

16. OTHER NECESSARY INFORMATION

Date of compiling slip: 20/02/2006

Latest date of modification, addition: 17/09/2019

Name of compiling organization or individual: VEDAN VIETNAM ENTERPRISE CORP., LTD.

Note for reader:

The information in the chemical safety slip is compiled based on valid and latest knowledge and on

dangerous chemicals and should be used to implement measures to prevent the risk, accidents.		
Dangerous chemicals in this slip may have other hazardous properties depending on the circumstances of		
use and exposure.		