

# WATTCCON

WATER TREATMENT TECHNOLOGY AND  
CHEMICAL COMPANY (NIG) LIMITED  
RC. 497 339

With technical assistance of: GE Water & Process Technologies Inc., USA

## WATTCCON HYPO 12.5 MATERIAL SAFETY DATA SHEET (INDICATIVE DATA)

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **WATTCCON HYPO 12.5**

NAFDAC code: Pending

Other names: Sodium Hypochlorite 12.5%, Sodium Hypochlorite Solution

Product Use: Process agent, universal disinfectant and bleach

Manufacturer: Water Treatment Technology and Chemical Company (Nig) Ltd  
Headquarter Annex: 20 Ali Akilu Road (Zadina Plaza)  
Kaduna, Nigeria.

Postal Address: PO Box 8808, Kaduna, Nigeria  
Telephone: +234 62 213585, 885151. Fax: +234 62 213585  
Emergency Tel: +234 803 3113 878 (24 Hour)

### 2. HAZARDS IDENTIFICATION

General: Contact with skin and eyes may be cause burns. Do not mix with other chemicals without prior approval from the manufacturer.

Hazard symbol: Corrosive (C)

Risk-phrases: R34 Causes burns.  
R31 Contact with acids liberates toxic gas.

Safety-phrases: S(½) 28-45-50 Keep locked up and out of reach of children. After contact with skin, wash immediately with plenty of water. In case of an accident, or if you feel unwell, contact a Doctor or Poisons Information Centre: +234 62 213585. Do not mix with other chemicals without prior approval from the manufacturer.

Classified as **HAZARDOUS** and **DANGEROUS GOODS** according to the International Dangerous Goods Code.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Entity	CAS Number	Proportion (% w/w)
Sodium Hypochlorite	7681-52-9	10 - 30
Sodium Hydroxide	1310-73-2	<1

Other ingredients classified as not hazardous according to the criteria of NOHSC.

### 4. FIRST AID MEASURES

If poisoning occurs contact a doctor or Poisons Information Centre Phone +234 62 213585

Swallowed: Do **not** induce vomiting. Rinse out mouth with water then give large quantities of water to drink. Do not give anything if victim is unconscious. Seek medical advice.

Eye exposure:	Hold eyelids open and irrigate continuously with water for 15 minutes. Lift upper and lower lids occasionally. Seek medical advice.
Skin exposure:	Remove all contaminated clothing. Wash affected areas thoroughly with soap and water. Wash contaminated clothing before reuse. If irritation persists seek medical advice.
Inhalation:	Remove from contaminated area immediately to fresh air; avoid becoming a casualty. If breathing is difficult, give oxygen. If not breathing, apply artificial resuscitation. Seek medical advice.
First Aid Facilities:	Use should be made of an on-site approved first aid kit if required in the first instance until medical assistance is forthcoming.
Advice to Doctor:	Treat symptomatically. Show this MSDS to the medical practitioner.

## 5. FIRE-FIGHTING MEASURES

Extinguishing media:	Use extinguishing agents appropriate for surrounding fire. Water spray may be used to cool containers.
Hazards from combustion products:	This material is non-flammable and non-combustible. Heat and acid contamination will produce irritating and toxic fumes. May decompose, generating irritating chlorine gas. Fumes may be highly toxic and irritating.
Special precautions for fire fighters:	Fire fighters to wear full body protective clothing with breathing apparatus. Deluge with water to cool containers. Evacuate area move upwind of fire.
Hazchem code:	2X

## 6. ACCIDENTAL RELEASE MEASURES

Personal protection:	Ensure an eye bath and safety shower is available. Operators are recommended to wear full protective clothing, glasses/goggles, chemical resistant gloves and apron etc., including footwear.
Spills:	Ventilate the area of the spill or leak. For large spills, evacuate the hazard area of unprotected personnel. Wear appropriate protective clothing. Contain with absorbent and remove to drums for disposal. Soak up residue with an absorbent such as clay, sand or other suitable material; place in containers for proper disposal. Flush area with water to remove trace residue, dispose of flush solutions as above. For small spills, take up with an absorbent material and place in non-leaking containers; seal tightly for proper disposal. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Remove in accordance with local waste management authority.
Environmental precautions:	Prevent spills from entering drains and waterways.

## 7. HANDLING AND STORAGE

Handling:	Handle according to good manufacturing and industrial hygiene practices. Do not drink, eat or smoke while handling. Respect good personal hygiene.
Storage:	Store in original container. Keep container upright in cool dry area. Keep lid of container closed when not in use. If containers become heated decomposition products (mainly oxygen) should be carefully vented.



Materials to avoid: Store away from class 8 acids. Do not mix or contaminate with ammonia, hydrocarbons, acids, alcohols or ethers.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NOHSC exposure limits: NAFDAC Nigeria assigns no value for Sodium Hypochlorite. However, TWA for chlorine (decomposition product) = 1.0 ppm. Sodium Hydroxide: TWA = 2mg/m<sup>3</sup>.

Biological limit values: No Biological Limit values available.

Engineering controls: Use in a well ventilated area. If ventilation is insufficient use a corrosive resistant ventilation system separate from other exhaust systems. Engineering control methods to reduce hazards are preferred.

Personal protective equipment: Ensure an eye bath and safety shower is available. Operators are recommended to wear full protective clothing, glasses/goggles, chemical resistant gloves and apron etc., including footwear.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, pale yellow, mobile liquid.

Odour: Characteristic

pH: 12.5 13.5

Boiling range (oC): ca. 100

Melting range (oC): Not relevant

Flash point (oC): > 100

Specific gravity (g/ml): 1.17 1.19

Solubility: Totally miscible in water

## 10. STABILITY AND REACTIVITY

Reactivity: Reacts vigorously with acids producing dangerous levels of gaseous chlorine. Incompatible with amines, ammonium salts, aziridine, methanol and phenylacetonitrile.

Conditions to avoid: Stability decreases with heat, light exposure, decrease in pH and contamination with heavy metals, such as nickel, cobalt, copper and iron. Use only as directed. Store in accordance with directions given in Section 7 of this MSDS.

Incompatible materials: Strong acids, oxidizable materials, reducing agents, ammonia solutions, ether, peroxides, reducing agents and many organic and inorganic chemicals such as paint, kerosene, paint thinners, shellac, grease and oils.

Hazardous decomposition products: Chlorine. Additional decomposition products that depend upon pH, temperature and time are sodium chloride, sodium chlorate and oxygen.

## 11. TOXICOLOGICAL INFORMATION

Health effects from likely routes of exposure.

**Swallowed:** This material is severely irritating to the gastrointestinal tract. Ingestion can cause nausea and vomiting.

**Eye:** This material is corrosive to the eyes and can cause permanent damage if not promptly treated. High concentrations of vapours will cause irritation.

**Skin:** Corrosive to the skin.

**Inhale:** Inhalation of vapours or spray mists at high concentrations may cause irritation to the mucous membrane and upper respiratory tract.

**Chronic** Repeated or prolonged skin contact can cause chemical burns.

**Toxicity Data:** By ingestion, Grade 1: oral rat LD50 = 8.91 g/kg

This material may be harmful to aquatic life in low concentrations.

Remove for disposal in accordance with local waste management regulations.

	UN Number	Proper Shipping Name	Class	Sub-Class	Hazchem	Pack Grp
<b>ROAD (ADR)</b>	1791	Hypochlorite Solution	8	-	2X	III
<b>AIR (IATA)</b>	Contact WATTCCON if this product is to be transported by air.					
<b>SEA (IMDG)</b>	Contact WATTCCON if this product is to be transported by sea.					

Special precautions for user: Store away from class 8 acids.

Hazard symbol:	Corrosive (C)
Risk-phrases:	R34 Causes burns. R31 Contact with acids liberates toxic gas.
Safety-phrases:	S(1/2) 28-45-50 Keep locked up and out of reach of children. After contact with skin, wash immediately with plenty of water. In case of an accident or if you feel unwell; contact a doctor or Poisons Information Centre +234 62 213585. Do not mix with other chemicals without prior approval from the manufacturer.
Contains:	Sodium Hypochlorite
Poisons Schedule:	S5

**DO NOT MIX WITH OTHER CHEMICALS WITHOUT PRIOR CONSULTATION WITH THE MANUFACTURER.** Always use product as directed. Never return any unused material to original drum.

**NOTICE:** This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the Workplace. Please refer to the Product **Technical Appraisal Sheet** (Instructions for use), and the label on the drum. WATTCCONs cannot anticipate or control the individual working conditions encountered and so each user should read this MSDS carefully, and if in doubt ring the Company number +234 803 3113 878 (24 hour service) and / or the Contact Point Number given below. Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is lodged with each customer and is available on request.

**END OF MSDS**

MSDS version: 1

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