



BASP CHEMICAL PRODUCTS LTD.

MATERIAL SAFETY DATA SHEET

CHLORINE WATER – MSDS

Chemical Product and Company Identification

Product Name : CHLORINE WATER - SATURATED
Chemical Name : CHLORINE
Chemical Formula : HClO
Distributor : **BASP Chemical Products Limited**
Address : 105/106 Parshwa Chamber, 17/21 Issaji Street, Vadgadi,
Mumbai – 400 003, INDIA
Telephone : (+91)-22-23449557,66312930
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Composition and information of Ingredients

COMPOSITION		
Name	CAS #	% by Weight
Hydrogen chloride	7647-01-0	20-38
Water	7732-18-5	62-80

Toxicological Data on Ingredients: Chlorine LD50: Not available. LC50: Not available.

Hazardous Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (permeator). Non-sensitizer for skin. Corrosive to skin and eyes on contact. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.



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Potential Chronic Health Effects:

Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion. Non-sensitizer for skin. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection

First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:

In case of skin contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used, washing clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled by mistake, get some fresh air immediately. If the person is not able to breath, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.



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Fire and Explosion Data

Flammability of the Product	:Non-Flammable
Auto – Ignition Temperature	:Not Applicable
Flash Points	:Not Applicable
Flammable Limits	:Not Applicable
Products of Combustion:	Not Available.

Fire Hazards in Presence of Various Substances: Metals.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Risks of explosion of the product in presence of static discharge: Not Available.

Special Remarks on Explosion Hazards: Not Applicable.

Special Remarks on Fire Hazards: Not Available.

Special Remarks on Explosion Hazards: Not Available.

Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container

LARGE Spill

Corrosive liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers. Basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Handling and Storage

Precautions:

Keep container dry. Do not breathe gas/fumes/ vapor /spray. Never add water to this product.



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Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes

Storage: Corrosive materials should be stored in a separate safety storage cabinet or room.

Exposure Control / Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Chlorine TWA: 0.5 STEL: 1 (ppm) Consult local authorities for acceptable exposure limits.

Physical and Chemical Properties

Physical State and appearance:	Liquid
Odor:	Unpleasant. (Slight.)
Taste:	Not Available
Molecular Weight:	Not Available
Color:	Not Available
pH (1% soln/water):	Neutral.

Boiling Point: The lowest known value is 100°C (212°F) (Water).

Melting Point: Not available.

Critical Temperature: Not available

Specific Gravity: The only known value is 1 (Water = 1) (Water).



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Solubility: Easily soluble in cold water. Partially soluble in hot water.

Vapor Pressure: The highest known value is 17.535 mm of Hg (@ 20°C) (Water).

Vapor Density: The highest known value is 0.62 (Air = 1) (Water).

Volatility:	Not applicable.
Odor Threshold:	Not available.
Water / Oil Dist. Coeff.:	Not applicable.
Dispersion Properties:	See solubility in water.
Solubility in solvents:	Not applicable.

Stability and Reactivity Data

Stability: This Product is Stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Slightly reactive to reactive with reducing agents, combustible materials, organic materials.

Corrosivity: Slightly corrosive to corrosive in presence of steel, of aluminum, of zinc, of copper, of stainless steel(304), of stainless steel(316). Non-corrosive in presence of glass.

Special Remarks on Corrosivity: Incompatible with alcohols and a wide variety of metals. Keep away from heat and direct sunlight. (Chlorine)

Special Remarks on Reactivity: Not Available.

Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Chronic Effects on Humans: The substance is toxic to lungs, mucous membranes.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (permeator). Non-sensitizer for skin.

Special Remarks on Toxicity to Animals: Not available.



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Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Material is irritating to mucous membranes and upper respiratory tract. (Chlorine)

Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: : The products of degradation are as toxic as the original product.

Disposal Consideration

Product Disposal:

Untreated SBP waste must never be discharged directly in to the sewers. Review National / Regional regulations.

Packaging Disposal:

Packing material does not get contaminated & can be disposed off by usual methods in accordance with National / Regional requirements.

Transport Information

UN No. & Symbols : Class 8: Corrosive liquid

Road & Rail Transport :Not available.

GGVE / GGVS :Not applicable

IMDG :Not applicable

Air Transport :Not applicable

P Phrases :Not applicable

S Phrases :Not applicable



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Regulatory Information

Health and safety information: CHLORINE WATER

Other Classifications: Not Applicable

Protective Equipment:

Gloves. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Face shield.

Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall **BASP Chemical Products Limited** be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if **BASP Chemical Products Limited** has been advised of the possibility of such damages.