Material Safety Data Sheet

Section1. Product Information and Company Identification			
Product name	Chlorine Water		
Mol.formula	-	**Cas no**	-
Mol.wt	-		
Manfacture name	Pioneers for laboratory chemicals		
Brand name	Piochem		
Address	Area 540, Industrial Zone 6th October city Giza, Egypt.		
Website	www.piochem.com		
E-mail	info@piochem.com		
Phone number	+201225728304 , +201023932115		

SECTION 2: Hazards identification

Classification of the substance or mixture:

Skin corrosion, category 1A
Serious eye damage, category 1
Specific target organ toxicity following single exposure, category 3
Acute hazards to the aquatic environment, category 2

Hazard statements:

Causes serious eye damage.
Causes severe skin burns and eye
damage. May cause respiratory irritation.
Harmful to aquatic life.

Precautionary statements:

If medical advice is needed, have product container or label at hand. Keep
out of reach of children.
Read label before use.
Wear protective gloves/protective clothing/eye protection/face protection. Do
not breathe dust/fume/gas/mist/vapours/spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
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.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF
SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.
Store locked up.
Store in a well ventilated place. Keep container tightly closed.

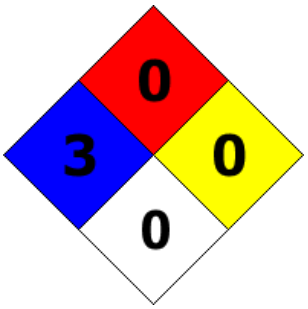
Dispose of contents and container to an approved waste disposal plant.

Other Non-GHS Classification:

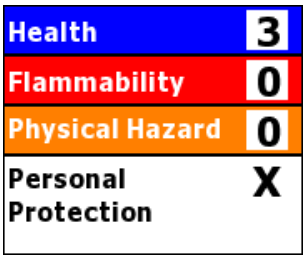
WHMIS

E 

NFPA/HMIS



NFPA SCALE (0-4)



HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 7782-50-5	Chlorine gas	0.6 %
CAS 7732-18-5	Water, Purified	>99 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Keep eyelids open while rinsing. Seek medical attention.

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately seek medical attention.

Most important symptoms and effects, both acute and delayed:

Irritation of respiratory track, coughing, burning, abdominal pain, vomiting, sensitization to light. May cause

dermatitis, erosion of teeth and conjunctivitis.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing agents:

None identified.

Special hazards arising from the substance or mixture:

Can react with metal to form flammable and explosive hydrogen gas. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Liberates toxic chlorine gas when heated above 20C.

Advice for firefighters:

Protective equipment:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Wear self-contained respiratory protective device. Wear fully protective suit.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational. Avoid contact with skin, eyes and clothing.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Wear protective eyewear, gloves, and clothing. Refer to Section 8. Absorb with inert material and containerize for disposal.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid ingestion and inhalation. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection



Control Parameters: 7782-50-5, Chlorine gas, ACGIH TLV: 0.5ppm, OSHA PEL: 3 mg/m3.

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection: Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before re-wearing, wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Pale yellow liquid	**Explosion limit lower**: **Explosion limit upper**:	Not determined Not determined
Odor:	Chlorine odor	**Vapor pressure**:	Not determined
Odor threshold:	Not determined	**Vapor density**:	Not determined
pH-value:	Not determined	**Relative density**:	1.02
Melting/Freezing point:	0 °C (32 °F)	**Solubilities**:	Soluble in water.
Boiling point/Boiling range:	Decomposes	**Partition coefficient (n-octanol/water)**:	Not determined
Flash point (closed cup):	Not applicable	**Auto/Self-ignition temperature**:	Not determined
Evaporation rate:	>1	**Decomposition temperature**:	Not determined
Flammability (solid,gaseous):	Not applicable	**Viscosity**:	a. Kinematic: Not determined b. Dynamic: Not determined
Density: Not determined			

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials.

Incompatible materials:

Ammonia, organic matter, active metals, hydrogen, strong oxidizers, strong reducing agents.

Hazardous decomposition products:

Hydrogen chloride, hydrogen gas, liberates chlorine gas.

SECTION 11: Toxicological information

Acute Toxicity: No additional information.	
Chronic Toxicity: No additional information.	
Corrosion Irritation: No additional information.	
Sensitization:	No additional information.
Single Target Organ (STOT):	No additional information.
Numerical Measures:	No additional information.
Carcinogenicity:	No additional information.
Mutagenicity:	No additional information.
Reproductive Toxicity:	No additional information.

SECTION 12: Ecological information

Ecotoxicity:
7782-50-5: 96 HR LC50 PIMEPHALES PROMELAS 0.1 MG/L
7782-50-5: 96 HR LC50 ONCORHYNCHUS MYKISS 0.014 MG/L
7782-50-5: 48 HR LC50 DAPHNIA MAGNA 0.017 MG/L

Persistence and degradability:

No information available.

Bioaccumulative potential:

No information available.

Mobility in soil:

No information available.

Other adverse effects:

No information available.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

UN-Number:

UN1760

UN proper shipping name:

Corrosive liquids, n.o.s., (Chlorine Water Solution)

Transport hazard class(es): None
Packing group: III
Environmental hazard: None
Transport in bulk: Not Applicable
Special precautions for user: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

7782-50-5 Chlorine.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

None of the ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act): 7782-50-5 Chlorine 10 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL): All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.