

1. IDENTIFICATION

Product Identifier

Product Name Liquid Chlorine

Recommended use of the chemical and restrictions on use

Recommended use Chlorine bleach
Restrictions on use Do not mix with acids

Supplier details

West Penetone Inc.
10900 Secant
Montreal, QC,
H1J 5S1
Tel: 514-355-4660

Emergency Telephone Number

Canutec (613)-996-6666

2. HAZARDS IDENTIFICATION

Classification

Skin Corrosion/Irritation	Category 1
Eye damage/ irritation	Category 1
Corrosive to metals	Category 1

Label Elements

DANGER

Hazard Statements

Causes severe skin burns and eye damage.
May be corrosive to metals.



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.
Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep only in original packaging.

Precautionary Statements - Response

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
Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant according to local, provincial/federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Sodium hypochlorite	7681-52-9	10-16
Sodium hydroxide	1310-73-2	1-4

4. FIRST AID MEASURES

Eye contact	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.
Skin contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Ingestion	Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Causes burns to eyes, skin and mucous membranes. Symptoms include tingling sensation and / or reddening of tissues.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Do not use dry chemical extinguishing agents that contain ammonium compounds. Some chemical extinguishing agents may react with this material.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. The product will react violently with acids, organic materials and metals and may generate toxic gases.

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 procedures

Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Acids, oxidizing agents, amines, ammonia, nitrites, reducing agents, organic compounds.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical Name	ACGIH TLV
Sodium hydroxide 1310-73-2	STEL: 2 mg/m ³

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Safety goggles.

Skin and body protection Wear rubber or neoprene gloves, rubber apron and boots.

Respiratory Protection If exposure limits are exceeded or if ventilation is inadequate, NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE :

Clear, light yellow liquid

ODOR :

Chlorine

ODOR THRESHOLD :

Not applicable

VAPOR PRESSURE, mm Hg AT 20°C :

Not applicable

VAPOR DENSITY (Air = 1) :

Not applicable

RELATIVE DENSITY AT 20°C:

1.2

pH :
13

MELTING POINT / FREEZING POINT :
- 14°C

BOILING POINT/BOILING RANGE :
>100 °C

FLASH POINT :
None

EVAPORATION RATE, water = 1 :
1

FLAMMABILITY (SOLID, GAS):
Not applicable

SOLUBILITY IN WATER :
Complete

PARTITION COEFFICIENT, N-OCTANOL/WATER :
Not available

AUTO-IGNITION TEMPERATURE :
None

DECOMPOSITION TEMPERATURE:
Not available

VISCOSITY:
<10 cps

FLAMMABLE LIMITS :

UPPER: Not applicable **LOWER :** Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Not reactive

Conditions to Avoid

Store away from incompatible materials.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Chlorine gas is generated when mixed with incompatible materials.

Incompatible Materials

Acids, oxidizing agents, amines, ammonia, nitrites, reducing agents, organic compounds.

Hazardous decomposition products

None

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite 7681-52-9	8910 mg/kg (Rat)	No data available	> 5.25 mg/L (rat) 4 hours
Sodium hydroxide 1310-73-2	500 mg/kg (Rabbit LDLo)	1350 mg/kg (Rabbit)	Not applicable

Information on likely sources of exposure

Serious eye damage/irritation

Corrosive to eyes and may cause grave lesions, including blindness.

Skin corrosion/irritation

Corrosive to skin.

Ingestion

Ingestion may cause burns to the digestive and respiratory tract.

Inhalation

Spray mist may cause irritation or burns to respiratory tract.

Delayed and immediate effects and also chronic effects from short and long-term exposure

Respiratory or skin sensitization

Not a sensitizer.

Germ cell mutagenicity

None known.

Carcinogenicity

No listed human carcinogens.

Reproductive toxicity

None known.

STOT - single exposure

No information available.

STOT-repeated exposure

No information available.

Aspiration Hazard

No information available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms include tingling sensation and / or reddening of tissues, eventually leading to burn lesions.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

No information available

Persistence and degradability

No information available

Bioaccumulative potential

None known

Mobility in soil

No information available

Other adverse effects

None known

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method**

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION**TDG classification**

UN1791, Hypochlorite solution, class 8, PG III

15. REGULATORY INFORMATION

All ingredients are listed on the DSL

16. OTHER INFORMATION**Preparation Date**

January 2, 2017

Revision Date

not applicable

Revision Note

not applicable

Disclaimer

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End of SDS