



# NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.  
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

## Safety Data Sheet (MSDS)

(According to GB/T 16483 and GB/T 17519; Adapts to GHS, IMDG, IATA Standards)

### SECTION 1: Identification

#### 1.1 Product Identifiers

- Product Name: Chlorine
- Product Number: CL2-20260225
- Brand: SIGALD
- CAS-No.: 7782-50-5
- Synonyms: Chlorine Gas

#### 1.2 Details of the supplier of the safety data sheet

- Company : NEWAY SINOPHC TECH. LIMITED
- RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI)PILOT FREE TRADE ZONE.
- Telephone : +86-021-50350029
- Fax : +86-021-50350029

#### 1.3 Emergency telephone

Emergency Phone # : +86-021-50350029  
(CHEMTREC)

#### 1.4 Uses

- Identified Uses: Water disinfection (municipal, industrial), bleaching (paper, textiles), organic synthesis (PVC, solvents), chemical intermediate.
- Uses Advised Against: Unauthorized use; any use without proper safety equipment and training.

### SECTION 2: Hazards Identification

2.1 GHS Classification: Acute toxicity (inhalation, Category 1); Skin corrosion (Category 1A); Eye damage (Category 1); Oxidizing gas (Category 1); Aquatic toxicity (Category 1)2.2 GHS Label Elements

- Hazard Pictogram: GHS06 (Skull and crossbones), GHS05 (Corrosion), GHS03 (Oxidizer), GHS09 (Environment)
- Signal Word: Danger
- Hazard Statements: H330 (Fatal if inhaled), H314 (Causes severe skin burns and eye damage), H270 (May cause or intensify fire; oxidizer), H400 (Very toxic to aquatic life)
- Precautionary Statements: P260 (Do not breathe gas/vapors/spray), P280 (Wear protective gloves/protective clothing/eye protection/face protection), P304+P340 (If inhaled: Remove victim to fresh air and keep at rest), P310 (Immediately call a poison center or doctor), P305+P351+P338 (If in eyes: Rinse cautiously with water)

### SECTION 3: Composition

- Substance: Pure Substance
- Formula: Cl<sub>2</sub>
- Molecular Weight: 70.90 g/mol



# NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.  
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

- Concentration:  $\geq 99.5\%$  ( $\text{Cl}_2$ )

## SECTION 4: First Aid Measures

- Inhaled: Immediately remove to fresh air. Administer oxygen if breathing is difficult. Keep victim calm. Immediately call a doctor or poison center.
- Skin Contact: Remove contaminated clothing, rinse skin thoroughly with plenty of running water for 15-20 minutes. Consult a doctor.
- Eye Contact: Hold eyes open, rinse thoroughly with large amounts of running water for 15-20 minutes. Immediately call a doctor.
- Swallowed: Not applicable (gas); if liquid chlorine is swallowed, rinse mouth with water. Do not induce vomiting. Call a doctor immediately.

## SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Water spray (mist), carbon dioxide ( $\text{CO}_2$ ), dry powder.
- Special Hazards: Strong oxidizer; supports combustion of organic materials. Reacts with reducing agents to produce toxic gases.
- Firefighter Protection: Wear full protective equipment and self-contained breathing apparatus. Cool cylinders with water spray from a safe distance.

## SECTION 6: Accidental Release Measures

- Personal Precautions: Evacuate area immediately. Wear self-contained breathing apparatus, chemical protective suit, gloves, eye/face protection.
- Environmental Precautions: Prevent release to waterways and sewers.
- Cleanup Methods: Ventilate area thoroughly. Use water spray to neutralize and disperse gas. Stop leak if safe to do so.

## SECTION 7: Handling and Storage

- Handling: Use only in well-ventilated, corrosion-resistant, explosion-proof areas. Use leak-proof equipment. Avoid contact with reducing agents, organic materials, ammonia.
- Storage: Store in cool, dry, well-ventilated warehouse. Use pressure-resistant, corrosion-resistant steel cylinders. Keep away from heat, sunlight, oxidizing agents, organic materials. Storage temperature  $\leq 30^\circ\text{C}$ .
- Shelf Life: 12 months (cylinder, proper storage).

## SECTION 8: Exposure Controls/Personal Protection

- PPE: Self-contained breathing apparatus (SCBA), chemical-resistant suit, nitrile gloves, chemical splash goggles, face shield.
- Engineering Controls: Closed system, gas detection systems, emergency shutdown systems, good ventilation.
- Exposure Limits: TWA (8h): 0.5 ppm (OSHA); STEL (15min): 1 ppm (OSHA).

## SECTION 9: Physical and Chemical Properties

- Physical State: Gas
- Color: Yellowish-green



## NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.  
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

---

- Odor: Pungent, irritating (detectable at 0.3 ppm)
- Melting Point: -101°C
- Boiling Point: -34.6°C
- Solubility: Slightly soluble in water (7.1 g/L at 20°C); soluble in organic solvents.
- Density: 2.99 g/L (air = 1, 25°C)
- Vapor Pressure: 673 kPa (20°C)
- Oxidizing Properties: Strong oxidizer.

### SECTION 10: Stability and Reactivity

- Stable under normal conditions. Incompatible with reducing agents, organic materials, ammonia, hydrogen, metals.

### SECTION 11: Toxicological Information

- Inhalation LC<sub>50</sub> (Rat, 1h): 293 ppm
- Skin Corrosion: Severe corrosion.
- Eye Damage: Severe eye damage (may cause blindness).

### SECTION 12: Ecological Information

- Aquatic Toxicity: Very toxic to fish (LC<sub>50</sub> < 0.1 mg/L, 96h) and aquatic organisms.
- Biodegradability: Not biodegradable.

### SECTION 13: Disposal Considerations

- Dispose in accordance with local, national, and international regulations. Neutralize with alkaline solutions (sodium hydroxide) before disposal. Incinerate in approved facilities with scrubbing systems.

### SECTION 14: Transport Information

- UN Number: UN1017
- Transport Hazard Class: 2.3 (Toxic gases) + 5.1 (Oxidizing substances)
- Packaging Group: I
- Marine Pollutant: Yes

### SECTION 15: Regulatory Information

- Complies with GHS, REACH, TSCA, IMDG Code, IATA-DGR regulations.
- Classified as a hazardous chemical under Chinese Hazardous Chemical Safety Management Regulation.

### SECTION 16: Other Information

- Revision Date: 25 FEB 2026