YURACHEM

INDUSTRIAL CHEMICALS & GASES DISTRIBUTION

TECHNICAL DATA SHEET (TDS)

Liquid Chlorine Gas (Commercial & Water Treatment Grade)

Chemical Formula:	Cl_2	**CAS Number:**	7782-50-5
Grade:	Industrial / Pure Grade	**Origin:**	India

PRODUCT DESCRIPTION

Yurachem Liquid Chlorine is a heavy, greenish-yellow liquefied gas kept under precise pressure metrics. It possesses a characteristically pungent, irritating, and highly distinctive odor. As a highly reactive non-metallic chemical element, it is packaged and filled under automated absolute atmospheric controls, rigorously matching international benchmarks required for heavy chemical synthesis and municipal environmental safety.

CHEMICAL & PHYSICAL SPECIFICATIONS

Technical Parameter	Industrial Specification Value	Test Method Reference
Chlorine Content (Purity / Assay)	≥ 99.80% v/v Min	IS 646 / Gas Chromatography
Moisture Content (Water)	≤ 20 ppm Max	Electrolytic Moisture Analyzer
Non-Volatile Residue	≤ 50 ppm Max	Gravimetric Evaporation Method
Boiling Point	-34.04 °C	Physical Constant Standard
Melting Point	-101.5 °C	Physical Constant Standard
Gas Density (at 0°C, 1 atm)	3.21 g/L (~2.5x heavier than air)	Theoretical Calculation Matrix

PRIMARY INDUSTRIAL APPLICATIONS

- **Water Purification & Safety:** Large-scale structural disinfection models across municipal drinking water networks, industrial pools, and deep sewage/wastewater treatment plants.

- **Chemical Synthesis Infrastructure:** Primary core asset for building active batches of Bleaching Powder, Sodium Hypochlorite, PVC lines, Polyurethanes, and chlorinated solvents.
- **Paper & Industrial Textiles:** Acting oxidative whitening agent applied across cellulose fibers, structural wood pulps, and primary heavy textile processing pipelines.

STANDARD PACKAGING & INFRASTRUCTURE

- **100 kg Pressurized Steel Cylinders:** Engineered for localized water utilities, specialized labs, and mid-tier manufacturing facilities.
- **930 kg Pressurized Tonners:** Heavy-duty industrial configurations optimized for mass-scale industrial networks and bulk plant consumers.