

## MILES® HYDROCHLORIC ACID (MURIATIC ACID)

### Safety Data Sheet

#### SECTION 1: IDENTIFICATION

**Product Name:** Hydrochloric acid (30–32%)

**CAS No.:** 7647-01-0 | Formula: HCl

**Recommended Use:** Acidizing and descaling, metal pickling, pH control and neutralization, chemical processing

**Supplier:** Miles Lubricants LLC

**Emergency Telephone:** CHEMTREC 1-800-424-9300 (US)

#### SECTION 2: HAZARD(S) IDENTIFICATION

**GHS Classification:** Met. Corr. 1; Skin Corr. 1B; Eye Dam. 1; STOT SE 3 (respiratory irritation)

**Signal Word:** Danger

**Hazard Statements:** H290 – May be corrosive to metals. H314 – Causes severe skin burns and eye damage. H335 – May cause respiratory irritation.

**Precautionary Statements:** P234, P260, P261, P264, P271, P280, P301+P330+P331, P303+P361+P353, P304+P340, P305+P351+P338, P310, P403+P233, P405, P501

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hydrogen chloride (CAS 7647-01-0): 30–32%; water: balance

#### SECTION 4: FIRST-AID MEASURES

**Eye Contact:** Flush immediately with water for at least 15 minutes, holding eyelids open; seek immediate medical attention.

**Skin Contact:** Remove contaminated clothing; flush skin with water for at least 15 minutes; seek immediate medical attention.

**Inhalation:** Move to fresh air; seek medical attention if breathing is difficult or symptoms persist.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention.

#### SECTION 5: FIRE-FIGHTING MEASURES

**Extinguishing Media:** Use media suitable for the surrounding fire.

**Special Hazards:** Not flammable; contact with some metals (such as aluminum and zinc) can release flammable hydrogen gas; containers may rupture when heated.

**Firefighter PPE:** SCBA and full chemical-resistant protective gear.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Wear protective equipment. Contain the spill and absorb with inert, non-combustible material; neutralize residues carefully; prevent entry to drains and waterways. Do not use combustible absorbents.

## **SECTION 7: HANDLING AND STORAGE**

Store in tightly closed, acid-resistant containers in a cool, well-ventilated area; corrosive fumes can degrade unsuitable containers. Keep away from bases, oxidizers and metals. When diluting, always add acid to water, never water to acid.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Limits:** OSHA PEL (ceiling) 5 ppm; ACGIH TLV (ceiling) 2 ppm.

**Engineering Controls:** Local exhaust ventilation; eyewash and safety shower nearby.

**PPE:** Chemical splash goggles and face shield; chemical-resistant gloves and protective clothing; NIOSH-approved acid-gas respirator if acid gas/fumes may exceed limits.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Clear, colorless to slightly yellow liquid | **Odor:** Sharp, pungent

**Boiling Point:** Varies with concentration | **Freezing Point:** Varies with concentration

**Specific Gravity:** approx. 1.16 @ 20°C | **Flash Point:** Not applicable

**Vapor Pressure:** approx. 20 mm Hg @ 20°C | **pH:** Below 0

**Solubility in Water:** Miscible

## **SECTION 10: STABILITY AND REACTIVITY**

Stable under normal conditions. Reacts with bases (heat), with metals (releases hydrogen gas) and with oxidizers such as bleach (releases chlorine gas).

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Corrosive: causes severe burns to skin and eyes; vapors and mist are corrosive to the respiratory tract; ingestion causes severe damage to the digestive tract.

## **SECTION 12: ECOLOGICAL INFORMATION**

Harmful to aquatic life because of its low pH. Prevent release to drains and waterways.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Neutralize and dispose per local/state/federal regulations; may be regulated as corrosive hazardous waste (D002).

**SECTION 14: TRANSPORT INFORMATION**

DOT: UN1789, Hydrochloric acid, Class 8, PG II.

**SECTION 15: REGULATORY INFORMATION**

Listed on TSCA. CERCLA reportable quantity: 5,000 lb. Confirm current regulatory status.

**SECTION 16: OTHER INFORMATION**

This SDS is a general reference compilation and does not replace the manufacturer's or Miles Lubricants LLC's officially issued, lot-specific SDS.