



## Material Safety Data Sheet

Print date: 11/15/2006

Version: 1

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### 1. COMPANY AND PRODUCT IDENTIFICATION

Product name: **1.0N Hydrochloric Acid (HCl)**  
Product code: TK-18

Supplier:  
Quaker Chemical Corporation  
Quaker Park One  
901 Hector Street  
Conshohocken, PA 19428  
610-832-4000  
E-mail: she@quakerchem.com

Emergency telephone number:  
\* 24 HOUR TRANSPORTATION:  
\*\*CHEMTREC: 1-800-424-9300  
703-527-3887 (Call collect outside of US)  
\* 24 HOUR EMERGENCY HEALTH & SAFETY:  
\*\*QUAKER CHEMICAL CORPORATION: (800) 523-7010(  
Within US only)  
Outside of US call (703) 527-3887

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### HAZARDOUS COMPONENTS

Components	CAS No.	Weight %	OSHA Ceiling Limits	OSHA TWA (final):	ACGIH Ceiling Limits	ACGIH Exposure Limits:	Vendor Exposure Limits:
Hydrochloric acid	7647-01-0	1 - 5%	5ppm 7mg/m <sup>3</sup>	None	2ppm	None	

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

The product causes burns of eyes, skin and mucous membranes.  
Irritating to respiratory system.  
Harmful if swallowed.

Signal word: DANGER

Principle routes of exposure: Eyes, skin and inhalation.

Eye contact: Causes eye burns. Risk of serious damage to eyes.

Skin contact: Causes skin burns.

Inhalation: Avoid breathing vapors or mists. High gas, vapor, mist, or dust concentrations may be harmful if inhaled. May cause irritation of respiratory tract.

Ingestion: Ingestion causes burns of the upper digestive and respiratory tracts.

Physico-chemical properties: No hazards resulting from material as supplied.

Incompatible products: Do not store near acids.

Safe storage temperature: 40-100 ° F

Shelf life: 6 months

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	ACGIH Ceiling Limits	ACGIH Exposure Limits:	OSHA Ceiling Limits	OSHA TWA (final):	NIOSH - Pocket Guide - TWAs:	Vendor Exposure Limits:
Hydrochloric acid	2ppm	None	5ppm 7mg/m <sup>3</sup>	None	5ppmCeiling 7mg/m <sup>3</sup> Ceilin g	None

Engineering measures: Ensure adequate ventilation.

### Personal Protective Equipment

General: Eye Wash and Safety Shower

Respiratory protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a NIOSH/MSHA certified respirator with organic vapor/P100 filter should be worn.

Hand protection: Rubber gloves  
Impervious gloves

Skin and body protection: Chemical resistant apron, Long sleeved clothing

Eye protection: Goggles.

Hygiene measures: Avoid contact with skin, eyes and clothing.



## 9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state: Liquid

Color: Clear

Odour: Bland

Boiling point/range (°C): 100

Boiling point/range (°F): 212

Vapour pressure: Not determined

Vapour density: Not determined

Solubility: Completely soluble

Evaporation rate: Not determined

pH: <2

Flash Point (°C): NA

Flash point (°F): NA

Decomposition temperature: Not determined

Auto-ignition temperature: Not determined

Density @ 15.5 ° C (g/cc) : 1

Aquatic toxicity: Not Determined

*Hydrochloric acid*

Ecotoxicity - Fish Species Data LC50 (Gambusia affinis - 96h) = 282 mg/L  
LC50 (Lepomis macrochirus - 48h) = 3.6 mg/L

### 13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products: Do not contaminate ponds, waterways or ditches with chemical or used container. Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

Contaminated packaging: Do not re-use empty containers

Methods for cleaning up: Soak up with oil absorbent material. After cleaning, flush away traces with water.

### 14. TRANSPORT INFORMATION

U. S. DEPARTMENT OF TRANSPORTATION:

UN/NA ID Number: UN1789  
Proper shipping name: Hydrochloric acid Mixture  
Hazard Class 8  
Subsidiary risk:  
Packing group: II  
RQ:  
Emergency Response Guide Number: 157  
DOT Label(s): R5

TDG (CANADA):

UN nr: UN1789  
Proper shipping name: Hydrochloric acid  
TDG Hazard Classification: 8  
Subsidiary class:  
Packing group: II

IMDG/IMO:

UN nr: UN1789  
Proper shipping name: Hydrochloric acid  
Class: 8  
Subsidiary class:  
Packing group: II  
EMS: 8-03  
Limited quantity: 500 mL

IATA/ICAO:

UN nr: UN1789  
Proper shipping name: Hydrochloric acid  
Subsidiary class:  
Packing group: II  
Maximum quantity for cargo only: 30 L  
Maximum quantity for passenger: 1 L  
Limited quantity: 0.5 L

Hydrochloric acid - 7647-01-0  
CAA - 1990 Hazardous Air Pollutants:  
Clean Water Act - Hazardous Substances

Listed  
Listed

STATE REGULATIONS (RTK):

California Proposition 65 Status:

No components are listed

Hydrochloric acid - 7647-01-0

MARTK:

Listed

NJRTK:

Listed

PARTK:

Listed

INVENTORY STATUS:

United States TSCA - Sect. 8(b) Inventory:

This product complies with TSCA

Canada DSL Inventory List -

This product complies with DSL

EC EINECS/ELINCS/NLP list:

This product complies with EINECS

**16. OTHER INFORMATION**

Sources of key data used to compile the data sheet: Material safety data sheets of the ingredients.

Prepared by: Quaker Chemical Corporation -Safety, Health and Environmental Affairs Group - US

Reason for revision: New Format

HMIS classification:

Health:  
3

Flammability:  
0

Reactivity:  
1

Personal Protection:  
H

NFPA rating:

Health:  
3

Flammability:  
0

Reactivity:  
1

Special:  
NA

\* Indicates possible chronic health effect

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.