

## MATERIAL SAFETY DATA SHEET

### CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION

**NAME:** Hydrochloric Acid Solution  
**CHEMICAL FAMILY:** Dilute acid solution  
**COMMON NAME OR SYNONYMS:** None  
**CATALOG NUMBER:** 16760 & 16770  
**DATE:** 06/15/2006

#### Manufacturer/Supplier

Electron Microscopy Sciences  
321 Morris Road  
Fort Washington, PA 19034  
Tel: 215-646-1566 / Fax: 215-646-8931  
<http://www.emsdiasum.com>  
email: [sgkcck@aol.com](mailto:sgkcck@aol.com)

**Emergency Phone Number (24 hours) CHEMTREC (800-424-9300)**

### COMPOSITION/INFORMATION ON INGREDIENTS

#### HAZARDOUS:

| MATERIAL | %  | TLV UNITS                   | CAS #       | EINECS      |
|----------|----|-----------------------------|-------------|-------------|
| HCl      | ~2 | C 7 mg/m <sup>3</sup> (TWA) | [7647-01-0] | (231-595-7) |

#### NONHAZARDOUS:

|       |     |     |             |  |
|-------|-----|-----|-------------|--|
| Water | ~98 | N/A | [7732-18-5] |  |
|-------|-----|-----|-------------|--|

### HAZARDS IDENTIFICATION

Corrosive. Harmful by ingestion. Irritating to the eyes and skin upon contact.

### FIRST AID MEASURES

*General:* Remove contaminated clothing, wash thoroughly before reuse.

*Eyes:* Flush with water for at least 15 minutes occasionally lifting upper and lower eyelids.

*Skin:* Remove contaminated clothing and flush with water thoroughly.

*Inhalation:* Move to fresh air. Consult doctor if symptoms persist.

*Ingestion:* Get immediate medical help. If the patient is conscious, give large quantities of water.

### FIRE FIGHTING MEASURES

Flash Point: Not applicable.

Extinguishing media: Appropriate to surrounding fire conditions.

Special Hazards and Procedure: It may emit toxic Cl fumes in case of fire.

Protective Equipment: Wear self-contained breathing apparatus and full protective suit.

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### ***ACCIDENTAL RELEASE MEASURES***

Ventilate area. Wear protective equipment. Do not allow to enter drainage systems or water ways. Dilute spill with water and neutralize with soda ash, limestone etc. Wipe up and put into a sealed container for proper disposal. Wash spill site with water after material pick up is complete. Wear chemical resistant glasses, gloves and clothing.

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### ***HANDLING & STORAGE***

Ensure good ventilation/exhaustion at work place. Have an immediate availability of an eye wash in case of emergency. Store at room temperature. Keep the container tightly closed.

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### ***EXPOSURE CONTROLS/PERSONAL PROTECTION***

Wear goggles, protective apron and acid resistant gloves. Use under fume hood. In case of brief exposure, use MSHA/NIOSH approved respirator.

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### ***PHYSICAL & CHEMICAL PROPERTIES***

|                      |                             |
|----------------------|-----------------------------|
| Form:                | Liquid                      |
| Appearance & odor:   | Transparent with acrid odor |
| Specific Gravity:    | Approximately 1.0           |
| pH:                  | 1 to 2                      |
| Melting point:       | n/a                         |
| Boiling Point:       | ~100C                       |
| Solubility in water: | Miscible                    |
| Danger of Explosion: | Not explosive               |
| Self-ignitability:   | Not self igniting           |

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### ***STABILITY & REACTIVITY***

**Stability:** Stable under normal storage and use.

**Reactivity:** No information available for this solution.

**Incompatibility:** No information available for this solution.

**Hazardous Decomposition Products:** Toxic fumes under conditions of fire.

**Hazardous Polymerization:** Will not occur.

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### ***TOXICOLOGICAL INFORMATION***

May produce caustic effect on skin, mucous membranes and eyes. Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### **TOXICITY DATA:**

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HCl—RTECS#-MW4025000  
ihl-hmn LCLo: 1300 ppm/30M  
unk-man LDLo: 81 mg/kg

***ECOLOGICAL INFORMATION***

Do not allow product to reach ground water, water bodies or sewage system.

***DISPOSAL CONSIDERATIONS***

Contact local Hazardous or Chemical waste disposal agency for regulations.

***TRANSPORT INFORMATION***

**Air :**  
CLASS 8  
UN/ID # 3264  
Packing Group: III  
Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s.  
(Hydrochloric acid solution).

***REGULATORY INFORMATION***

USA:  
SARA: Subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372.  
Components of this solution are reported in EPA TSCA Inventory List  
WHMIS Classification (Canada): CLASS E  
EC Guidelines:  
C: Corrosive  
Risk Phrases:  
34 - Causes burns  
Safety Phrases:  
36/37/39 - Wear suitable protective clothing, gloves, and eye/face protection  
26 - in case of contact with eyes, rinse immediately with plenty of water and seek medical attention.  
45 - in case of accident or if you feel unwell, seek medical advice immediately.

***OTHER INFORMATION***

