

***M S D S******Material Safety Data Sheet***

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## Hydrochloric Acid, 36.5% – 38%

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### SECTION 1 PRODUCT IDENTIFICATION

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NAME: Hydrochloric Acid, 36.5 - 38%  
EKI PRODUCT CODE: 4660, 4662  
SYNONYMS: N/I  
CAS NO: 7647-01-0  
FORMULA: HCl  
REVISION DATE: 12 October 2006

\*\*\*\*LABEL HAZARD STATEMENT AND PRECAUTIONS\*\*\*\*

DANGER. MAY BE FATAL IF SWALLOWED OR INHALED. CAUSES SEVERE BURNS. Do not get in eyes, on skin, on clothing. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

### SECTION 2 HAZARDOUS INGREDIENTS / EXPOSURE LIMITS

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INGREDIENT/CAS NO	OSHA PEL	ACGIH TLV
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Hydrogen Chloride 36.5-38%/7647-01-0	5 ppm CEIL	2 ppm CEIL

### SECTION 3 PHYSICAL CHARACTERISTICS

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SOLUBILITY IN WATER: Miscible	BOILING POINT (C): 53
VAPOR PRESSURE (mm Hg): 190	VAPOR DENSITY: N/I
SPECIFIC GRAVITY: 1.18	MELTING POINT (C): -74
EVAPORATION RATE: N/I	
APPEARANCE AND ODOR: Clear, colorless liquid. Pungent odor of HCl.	

### SECTION 4 FIRE / EXPLOSION HAZARD DATA

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FLASH POINT (C): Not expected to be a fire hazard.  
AUTOIGNITION TEMPERATURE (C): N/I  
FLAMMABLE LIMITS (%) UEL: N/I LEL: N/I  
EXTINGUISHING MEDIA: Suitable for surrounding fire.  
SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive-pressure mode.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: Extreme heat or contact with metals can generate flammable hydrogen gas.



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## SECTION 5 REACTIVITY DATA

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STABILITY: Stable

CONDITIONS TO AVOID: Excess heat or direct sunlight.

MATERIALS TO AVOID: Strong bases, metals and metal oxides, hydroxides, amino carbonates and other alkaline substances. Also cyanides, sulfides, sulfites formaldehyde.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, chlorine, hydrogen.

HAZARDOUS POLYMERIZATION: Will not occur.

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## SECTION 6 HEALTH HAZARD DATA

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ROUTES OF ENTRY AND EFFECTS OF OVEREXPOSURE

INHALATION: Causes irritation and burns of respiratory tract. May cause fatal pulmonary edema and circulatory collapse.

SKIN CONTACT: Causes irritation and burns.

EYE CONTACT: Causes burns. May cause permanent eye damage. Vapor causes irritation.

SKIN ABSORPTION: N/I

INGESTION: Cause burns to mouth, throat and upper G.I. tract. May be fatal.

CHRONIC: Erosion of teeth.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Pre-existing skin and eye disorders.

CARCINOGENICITY: IARC-3 Not classifiable as to human carcinogenicity.

### \*\*\*\* FIRST AID PROCEDURES \*\*\*\*

### \*\*\* START FIRST AID AND GET IMMEDIATE MEDICAL ATTENTION \*\*\*

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes, separating eyelids occasionally.

SKIN CONTACT: Immediately flush with plenty of water for at least 15 minutes while removing contaminated garments.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

INGESTION: DO NOT INDUCE VOMITING. If conscious, give several glasses of water to drink.

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## SECTION 7 PRECAUTIONS FOR SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED: Ventilate area. Wear a suitable respirator. Neutralize with soda ash or lime, absorb with inert material and containerize for disposal.

WASTE DISPOSAL METHOD: Dispose in accordance with all applicable federal, state, and local environmental regulations.

STORAGE: Store tightly closed at 15-30C.

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## SECTION 8 CONTROL MEASURES

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VENTILATION: Local preferred.

RESPIRATORY PROTECTION: Full face piece acid-gas or positive pressure air-supplied respirator.

EYE PROTECTION: Chemical splash safety goggles and or full face shield.

SKIN PROTECTION: Rubber or neoprene gloves, lab coat and impervious apron.

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