SECTION I - MANUFACTURER INFORMATION:

CH2O INC., 8820 OLD HWY 99 SE, Olympia, WA 98501 USA (360)943-6063 IN AN EMERGENCY CALL CHEMTREC AT 1-800-424-

SECTION II - INGREDIENT INFORMATION:

Ingredient

CAS Number 7647-01-0

OSHA PEL ACGIH TLV

Hydrochloric acid

% By Weight 17.0 5 ppm

5 ppm

SECTION III - HAZARDS IDENTIFICATION:

EYES: Exposure to this material will cause permanent eye damage; splash-proof eye protection must be worn while handling this product.

SKIN: This material will cause imitation and/or burning of skin. Prolonged or repeated contact may cause irreversible

damage. Persons with pre-existing skin disorders may be more suseptible to the effects of this material. INGESTION: Ingestion of this material will cause damage to tissues contacted. Small amounts of this product aspirated

into the respiratory system during ingestion or vomiting may cause pulmonary injury.

INHALATION: Inhalation may cause irritation of the mucous membranes and respiratory tract. Symptoms may include coughing, bloody nose, and sneezing. Severe overexposures may cause lung damage.

CARCINOGENICITY: IARC: N NTP: N OSHA: N

SECTION IV - EMERGENCY AND FIRST AID MEASURES:

EYES: Flush with large amounts of fresh water for 15 minutes, lifting upper and lower lids occasionally. Contact a physician immediately for further directions.

SKIN: Remove contaminated clothing and launder before re-use. Flush exposed areas with large amounts of fresh water. If skin feels slippery, continue flushing until slick feeling is gone. Contact a physician if irritation persists.

INGESTION: Do not induce vomiting. Give several glasses of water for dilution effect. If vomiting occurs, administer additional fluids. Never give anything by mouth to an unconscious person. Contact a physician immediately for further instructions.

INHALATION: Remove victim from exposure. Administer artificial respiration if breathing has stopped. Contact a physician immediately for further instructions.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

SECTION V - FIRE FIGHTING MEASURES:

Flash Point (closed cup; øF): NA

EXTINGUISHING MEDIA: Foam, dry chemical, water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear appropriate protective equipment including respiratory protection as conditions warrant. Stop spill/release if it can be done without risk. Move undamaged containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and containers exposed to heat and flame. Avoid spreading burning material with water used for cooling purposes.

UNUSUAL FIRE & EXPLOSION HAZARDS: Explosive hydrogen gas can be generated when product is in contact with aluminum, zinc (galvanized), or magnesium.

SECTION VI - ACCIDENTAL RELEASE INFOMATION:

SPILL RESPONSE: Only trained personnel with proper protective gear should be permitted in the area. Stop spill at source; reclaim material if possible for reuse. Containenze contaminated material for disposal. After all visible traces have been removed, flush area thoroughly with water. Dispose of all waste in accordance with local, state, and federal regulations. Care must be taken when using or disposing of chemical materials and/or their containers to prevent environmental contamination.

WASTE HANDLING PROCEDURE: See Section XIII

SECTION VII - HANDLING AND STORAGE:

HANDLING PROCEDURES: Eyewash fountain recommended in work area. Do not use pressure to empty container. Do not cut, grind, weld, or drill on or near this container. Containers, even when empty, can contain product residues and vapors; always obey hazard warnings and handle empty containers as if they were full.

STORAGE PROCEDURES: Store this material in a cool, dry, well ventilated area away from heat and all sources of ignition. Keep container tightly closed when not in use. Store only in approved containers that have been properly labeled. Protect container from physical damage.

SHELF LIFE: 12 months.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION:

EYE PROTECTION: Use safety glasses. Where contact is likely, splash-proof chemical goggles are recommended. If vapors cause eye discomfort, use a full-face respirator.

SKIN PROTECTION: Impervious gloves, apron, face shield, and boots should be worn when handling this material. RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory

protection is required, use an approved air-purifying respirator. When exposure guidelines may be greatly exceeded, use an approved positive pressure self-contained breathing apparatus.

ENVIRONMENTAL CONTROLS: Maintain airborne concentrations below the exposure guidelines. Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

HYGIENIC PROCEDURES: Never touch face with hands or gloves that may be contaminated with product. Wash thoroughly with soap and water after handling product.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES:

SPECIFIC GRAVITY: 1.100 pH (1% solution): 2-4 % VOLATILE: 75+

PHYSICAL STATE: Liquid

Solubility: Complete in water.

APPEARANCE AND ODOR: Opaque white color, pungent odor.

SECTION X - STABILITY AND REACTIVITY:

GENERAL: This product is considered a stable material under normal and anticipated storage and handling conditions. INCOMPATIBILITY: Amines, aluminum, possibly sodium, potassium, and magnesium. HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION XI - TOXICOLOGICAL INFORMATION:

Toxicological properties of this chemical mixture have not been thoroughly investigated.

SECTION XII - ECOLOGICAL PROPERTIES:

Ecological properties of this chemical mixture have not been thoroughly investigated.

SECTION XIII - DISPOSAL INFORMATION:

Dispose of all wastes in accordance with local, state, and federal regulations.

SECTION XIV - TRANSPORTATION INFORMATION:

CORROSIVE LIQUID, ACIDIC, INORGANIC, NOS (HYDROCHLORIC ACID), 8, UN 3264, II

RQ (LBS): 10000

SECTION XV - REGULATORY INFORMATION:

OSHA STATUS: This product is considered hazardous under the criteria of the Federal OSHA Hazard Communication Standard,

29 CFR 1910.1200.

SARA HAZARD CATEGORY:

Acute: Y

Chronic: N

Reactive: N

Fire: N

R-O-P: N

SARA 313 INFORMATION: This product contains a toxic chemical(s) subject to the reporting requirements of Section 313 of

Title III of the Superfund Amendments and Reauthorization Act and 40 CFR part 372. SECTION XVI - OTHER INFORMATION:

HMIS RATING: Health: 2 Flammability: 0 Reactivity: 0 Personal Protection: C
DISCLAIMER: The information on this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under the recommended conditions of use. As the use of this material is subject to conditions beyond the sellers control, seller makes no warranty express or implied as to this material or its use other than its chemical analysis when packed. The total liability of seller shall be limited to the purchase price of the product.

DATE PREPARED: 08/14/1996

SUPERCEDES DATE: 06/19/1996

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