

## 1 – PRODUCT IDENTIFICATION

**PRODUCT NAME:**.....ADJUVANT CH  
**PRODUCT USE:**.....Acid Activator for Chlorine Dioxide  
**COMPANY:**.....CH<sub>2</sub>O, Incorporated  
8820 Old Hwy. 99 SE, Tumwater, WA 98501  
360-943-6063, 800-562-6184, (fax) 360-352-4813, www.ch2o.com  
**EMERGENCY PHONE:** .....(800) 424-9300 (CHEMTREC)  
**SDS DATE:** .....9/22/2017 **SHELF LIFE:** 2 Years

## 2 – HAZARDS IDENTIFICATION

**GHS HEALTH CLASSIFICATIONS:** .....Acute Toxicity Inhalation (4) Skin Corrosion (1A)  
Serious Eye Damage (1) Target Organ Toxicity- Single Exposure (3)  
**GHS ENVIRONMENTAL CLASSIFICATIONS:** ..... None  
**GHS PHYSICAL CLASSIFICATIONS:**..... Substances Corrosive to Metal (1)



**GHS SIGNAL WORD: DANGER**

**GHS HAZARD STATEMENTS:**

H302: Harmful if swallowed  
H314: Causes severe skin burns and eye damage  
H335: May cause respiratory irritation  
H290: May be corrosive to metals

**GHS PRECAUTIONARY STATEMENTS:**

**PREVENTION:**

P260: Do not breathe dust/fumes/gas/mist/vapors/spray.  
P264: Wash skin thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P234: Keep only in original container.

**RESPONSE:**

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.  
P310: Immediately call a POISON CENTER or doctor.  
P363: Wash contaminated clothing before reuse.  
P390: Absorb spillage to prevent material damage.

**STORAGE:**

P405: Store locked up.

P403+233: Store in a well ventilated place, in a tightly closed container.

P406: Store in a corrosion resistant container, such as HDPE, or use a compatible inner liner.

**DISPOSAL:**

P501: Dispose of contents/container in accordance with local, state, and federal regulations.

**HAZARDS NOT OTHERWISE CLASSIFIED:** None known

**UNKNOWN TOXICITY STATEMENT:** 0% of this mixture consists of ingredient(s) of unknown acute toxicity.

### 3 – COMPOSITION / INFORMATION ON INGREDIENTS

**TRADE SECRET STATEMENT:** The specific chemical identity and/or the exact percentage of composition has been withheld as a trade secret.

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER	OSHA-STEL	OSHA-TWA

### 4 – FIRST-AID MEASURES

If exposed, immediately contact Poison Control Center or physician. **EYES:** Flush with large amounts of water for several minutes, lifting upper and lower lids occasionally. Remove contact lenses if present and continue rinsing. Get medical attention if irritation persists. **SKIN:** Wash exposed areas thoroughly with soap and water. Remove contaminated clothing and launder before reuse. If skin feels slippery, continue washing until slick feeling is gone. Contact a physician if irritation persists. **INGESTION:** Rinse mouth. Give large quantities of water. **DO NOT** induce vomiting. If vomiting occurs administer additional fluids. Contact a physician for further directions. Never give anything by mouth to an unconscious person. **INHALATION:** Remove individual to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen.

### 5 – FIRE-FIGHTING MEASURES

When responding to a fire involving this product, personal protection equipment must be worn that is appropriate to the chemicals involved in the fire, as well as respiratory protection. If it can be done safely and without risk, stop any release of chemical at the source. Move undamaged containers away from the vicinity of the fire if it can be done safely. Water spray may be used in cooling equipment and containers that have been exposed to heat and/or flame. Avoid spreading burning material with water used for cooling purposes.

**FLASHPOINT:** >200°F

**EXTINGUISHING MEDIA:** Foam, dry chemical, water spray

**SPECIAL FIRE FIGHTING PROCEDURES:** None

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None

### 6 – ACCIDENTAL RELEASE MEASURES

**SPILL PROCEDURES:** Only trained personnel equipped with proper protective gear should be permitted in the area. Stop spill at source. Reclaim material if possible for reuse. Containerize contaminated material for disposal. After all visible traces have been removed flush area thoroughly with water.

**WASTE:** 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.

## 7 – HANDLING and STORAGE

**HANDLING & STORAGE:** This is an extremely acidic product! Contact with material will cause severe burns; prolonged contact with material will destroy tissue. Complete safety equipment must be worn when handling. Wear impervious gloves, safety goggles and face shield, as well as protective clothing, boots and respiratory protection as necessary to minimize contact with product. When making solutions, add product slowly to the surface of cold water while stirring, thus avoiding violent spattering. Contact with some metals can rapidly generate hydrogen gas, which is explosive.

## 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**RESPIRATORY PROTECTION:** Atmospheric levels should be maintained below the exposure guidelines. 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. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**PROTECTIVE CLOTHING:** Chemical safety glasses, impervious gloves and an apron.

## 9 – PHYSICAL / CHEMICAL PROPERTIES

**PHYSICAL STATE:** ..... Liquid

**APPEARANCE; Color & Odor:** .. Colorless to very light yellow; Mild, pungent

**SPECIFIC GRAVITY:**..... 1.10

**pH, 1%:** .. ..... <2.2

**SOLUBILITY IN WATER:**..... Complete in water.

**VOLATILITY (wt. %, incl. H<sub>2</sub>O):** . 75-85

## 10 – STABILITY and REACTIVITY

**STABILITY:** Stable

**HAZARDOUS DECOMP.:** None known

**INCOMPATIBILITY:** Strongly alkaline materials, finely powdered metals, cyanides, nitrogen compounds, alkali halides, oxidizing agents and reducing agents.

**HAZARDOUS REACTIONS:** None known

## 11 – TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL PROPERTIES:** The toxicological properties of this chemical mixture as a whole have not been thoroughly investigated.

**LISTED CARCINOGEN:** This material does not contain any known or suspected carcinogens.

**MEDICAL CONDITION AGGRAVATED:** None known

## 12 – ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE:** The environmental properties of this chemical mixture have not been thoroughly investigated.

## 13 –DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** Dispose of all waste product and wastes generated from this product in accordance with local, state, and federal regulations. Assume wastes are hazardous unless characterization demonstrates otherwise. Handle empty drums as if they contain chemical residual until they have been thoroughly decontaminated.

## 14 – TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** .....CORROSIVE LIQUID, ACIDIC, INORGANIC, NOS,  
**HAZARD CLASS:** ..... 8  
**UN/NA NUMBER:** .....UN 3264  
**PACKAGING GROUP :** .....III

## 15 - REGULATIONS

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29CFR 1910.1200

**EPA SARA Title III Chemical Listings:**

<b>Acute:</b> ..... Yes	<b>Chronic:</b> ..... No
<b>Fire:</b> ..... No	<b>Pressure:</b> ..... No
<b>Reactive:</b> ..... No	

**SARA SECTION 313:** This product DOES NOT contain 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.

## 16 – OTHER INFORMATION

**HMIS RATING:**

**HEALTH:** 2,      **FLAMMABILITY:** 0,      **REACTIVITY:** 0,      **PERSONAL PROTECTION:** C

**ADDITIONAL INFORMATION:** None known