

## 1 – PRODUCT IDENTIFICATION

**PRODUCT NAME:**..... 885HF  
**PRODUCT USE:**..... Specialty Product  
**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:** ..... 3/6/2017 **SHELF LIFE:** 2 Years

## 2 – HAZARDS IDENTIFICATION

**GHS HEALTH CLASSIFICATIONS:** ..... Acute Toxicity Oral (2) Acute Toxicity Dermal (2)  
Acute Toxicity Inhalation (2) Skin Corrosion (1A) Serious Eye Damage (1) Target Organ Toxicity- Single  
Exposure (3) Aspiration Toxicity (1)

**GHS ENVIRONMENTAL CLASSIFICATIONS:** ..... None

**GHS PHYSICAL CLASSIFICATIONS:** ..... Substances Corrosive to Metal (1)



**GHS SIGNAL WORD: DANGER**

### GHS HAZARD STATEMENTS:

H300: Fatal if swallowed  
H310: Fatal in contact with skin  
H330: Fatal if inhaled  
H314: Causes severe skin burns and eye damage  
H335: May cause respiratory irritation  
H304: May be fatal if swallowed and enters airways  
H290: May be corrosive to metals

### GHS PRECAUTIONARY STATEMENTS:

#### PREVENTION:

P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.  
P262: Do not get in eyes, on skin, or on clothing.  
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.  
P284: In case of inadequate ventilation, wear respiratory protection.  
P234: Keep only in original container.

#### RESPONSE:

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
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.  
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.
- P320: Specific treatment is urgent (see guidance on this label).
- P321: See first aid measures on the SDS.
- P362: Take off contaminated clothing.
- 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
Hydrogen Fluoride	14.7	7664-39-3	6 ppm (15 min)	3 ppm

### 4 – FIRST-AID MEASURES

**EYES:** Flush with large amounts of water, lifting upper and lower lids occasionally. 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:** 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. If breathing is difficult, give oxygen. Contact a physician if irritation persists.

### 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:** 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 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:** Face shield. Impervious clothing/boots to minimize contact with product and its solutions. Chemical safety glasses and impervious gloves.

## 9 – PHYSICAL / CHEMICAL PROPERTIES

**PHYSICAL STATE:** ..... Liquid  
**APPEARANCE; Color & Odor:** .. Yellow; Strong, pungent  
**SPECIFIC GRAVITY:**..... 1.17  
**pH, 1%:** .. ..... <2.5  
**SOLUBILITY IN WATER:**..... Complete in water.  
**VOLATILITY (wt. %, incl. H<sub>2</sub>O):** . 55-65

## 10 – STABILITY and REACTIVITY

**STABILITY:** Stable  
**HAZARDOUS DECOMP.:** Hydrogen Fluoride, Acid Vapors, Hydrogen Gas  
**INCOMPATIBILITY:** Alkaline Materials. Oxidizing Materials. Reducing Materials. Organic Materials.  
**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 :** .....II

## 15 - REGULATIONS

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

### EPA SARA Title III Chemical Listings:

**Acute:** ..... Yes

**Chronic:** ..... Yes

**Fire:**..... No

**Pressure:** ..... No

**Reactive:** .....No

**SARA SECTION 313:** 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.

## 16 – OTHER INFORMATION

### HMIS RATING:

**HEALTH:** 3,      **FLAMMABILITY:** 0,      **REACTIVITY:** 1,      **PERSONAL PROTECTION:** D

**ADDITIONAL INFORMATION:** Consult a physician. Show this safety data sheet to the doctor in attendance. Hydrofluoric (HF) acid burns require immediate and specialized first aid and medical treatment. Symptoms may be delayed up to 24 hours depending on the concentration of HF. After decontamination with water, further damage can occur due to penetration/absorption of the fluoride ion. Treatment should be directed toward binding the fluoride ion as well as the effects of exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel repeated until burning ceases. More serious skin exposures may require subcutaneous calcium gluconate except for digital areas unless the physician is experienced in this technique, due to the potential for tissue injury from increased pressure. Absorption can readily occur through the subungual areas and should be considered when undergoing decontamination. Prevention of absorption of the fluoride ion in cases of ingestion can be obtained by giving milk, chewable calcium carbonate tablets or Milk of Magnesia to conscious victims. Conditions such as hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored for, since they can occur after exposure. Move out of dangerous area.