



## Safety Data Sheet

### 1 – PRODUCT IDENTIFICATION

**PRODUCT NAME:**.....**AC-160**

**PRODUCT NUMBER:** .....AC-160

**DESCRIPTION:** .....Solution

**OTHER MEANS OF IDENTIFICATION:** .....Clear to slightly hazy red brown liquid, with a slight iron acidic odor.

**RECOMMENDED USE:** .....Water treatment chemical.

**RESTRICTIONS ON USE:** .....Use only as directed.

**COMPANY:**..... CHEMTRON CORPORATION

3500 Harry S. Truman Blvd

St. Charles, MO 63301

636-940-5445 (Mon-Fri., 8:00-4:00)

www.chemtroncorporation.com

**EMERGENCY PHONE:** .....(800) 424-9300 (CHEMTREC)

**REVISION DATE:**.....SEPTEMBER 1, 2016

### 2 – HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:**.....Use reasonable care in handling. Protect eyes, skin and avoid spills on clothing. Keep container tightly closed when not in use. Store in cool, dry area. Avoid excessive breathing of vapors. Maintain adequate ventilation

**CLASSIFICATION 29 CFR 1910.1200:** .....Product is hazardous by OSHA criteria.



**GHS SIGNAL WORD:** .....**Danger**

**GHS HAZARD STATEMENTS:**.....H313 H333: May be harmful in contact with skin or if inhaled

H302: Harmful if swallowed:

H290: May be corrosive to metals

**GHS PRECAUTIONARY STATEMENTS:**.....P280: Wear protective gloves/protective clothing/eye protection/face protection; when conditions warrant use, add face shield, apron, and/or rubber boots.

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P270: Do not eat, drink or smoke when using this product

P264: Wash ... thoroughly after handling, wash gloves and contaminated surfaces.

P310: Immediately call a POISON CENTER/doctor/...

P405: Store locked up

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



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**HAZARDS NOT OTHERWISE CLASSIFIED:** .....None known

**INGREDIENTS WITH UNKNOWN TOXICITY:** .....None Known

**POTENTIAL ENVIRONMENTAL EFFECTS:** .....Toxic to aquatic life with long lasting effects.

### 3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER
Iron Trichloride	31-45	7705-08-0
Hydrogen Chloride	0.01-1.0	7647-01-0
Ferrous Chloride	0.01-0.7	7758-94-3

The exact percent by weight of the ingredients in this formulation is proprietary.

### 4 – FIRST-AID MEASURES

**BREATHING (INHALATION):**..Call a physician or poison control center immediately. Remove to fresh air, If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**SWALLOWING (INGESTION):**..Call a physician or poison control center immediately. Do NOT induce vomiting. Rinse mouth, Drink 4 to 8 ounces (120-240 ml) of water or milk as soon as possible after ingestion. Never give anything by mouth to an unconscious person.

**EYES:**.....Immediate medical attention is required. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not rub affected area Skin Contact.

**SKIN (DERMAL):** .....Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse.

**IMMEDIATE OR SPECIAL TREATMENT:** .....Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

### 5 – FIRE-FIGHTING MEASURES

**FLASHPOINT:**.....Not Flammable.

**EXTINGUISHING MEDIA:** .....Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**SPECIAL FIRE FIGHTING PROCEDURES:** .....The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion, do not breathe fumes.



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### 6 – ACCIDENTAL RELEASE MEASURES

**SPILL PROCEDURES:**.....Neutralize with soda ash or lime. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. For small spills, absorb material with clay absorbent or other compatible material. Dispose of the waste material according to local, state and governmental requirements. For large spills, contain the material using barriers of absorbent pigs, clay absorbent or earth dams. US regulations require reporting spills of this material that could reach any surface waters. The toll-free phone number for the US Coast Guard National Response Center is 1-800-424-8802. Spills exceeding the Reportable Quantity (RQ) of 1000 pounds or more must be reported to the National Response Center, (800) 424-8802.

**PERSONAL PRECAUTIONS:**....Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

### 7 – HANDLING and STORAGE

**STORAGE:** .....Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled container.

**HANDLING:**.....Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

### 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE LIMITS:** .....Ensure adequate ventilation, especially in confined areas.

INGREDIENT	SOURCE & PARAMETER	EXPOSURE LIMIT
Iron trichloride	TWA ACGIH TLV	1 mg/m <sup>3</sup> Fe
Iron trichloride	TWA NIOSH IDLH	1 mg/m <sup>3</sup> Fe
Hydrogen chloride	ACGIH TLV ceiling	2 ppm
Hydrogen chloride	OSHA PEL ceiling	7 mg/m <sup>3</sup> 5 ppm
Hydrogen chloride	TWA NIOSH IDLH	IDHL 50 ppm ceiling 5 ppm ceiling 7 ppm
Ferrous chloride	TWA ACGIH TLV	1 mg/m <sup>3</sup> Fe



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Ferrous chloride	OSHA PEL	TWA 1 mg/m <sup>3</sup> Fe
Ferrous chloride	TWA NIOSH IDLH	1 mg/m <sup>3</sup> Fe

**PROTECTIVE CLOTHING:** .....Chemical goggles, face shield, always wear eye protection when working with any chemical. Impervious gloves, clean body covering, rubber apron, rubber boots

**ADDITIONAL MEASURES:**.....Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing.

### 9 – PHYSICAL / CHEMICAL PROPERTIES

**APPEARANCE:** .....Clear to slightly hazy red brown liquid.

**ODOR:** .....Slight Iron Acidic.

**BOILING POINT:** .....110 °C / 230 °F

**VAPOR PRESSURE:**.....No data available.

**VAPOR DENSITY (AIR=1):** .....No data available

**SPECIFIC GRAVITY:** .....1.40

**pH:** .....< 2

**SOLUBILITY IN WATER:** .....Completely miscible in water

**FLAMMABILITY:** .....Not Flamable

**EVAPORATION RATE:**.....< 1

### 10 – STABILITY and REACTIVITY

**REACTIVITY:** .....None under normal processing and storage.

**STABILITY:** .....Stable under recommended storage conditions.

**HAZARDOUS POLYMERIZATION:** .....None known.

**INCOMPATIBILITY:** .....Incompatible with strong acids and bases, oxidizers, steel, and most metals.

**HAZARDOUS REACTIONS:** .....Exposure to air or moisture over prolonged periods.

**HAZARDOUS DECOMP:** .....None under normal processing and storage.

### 11 – TOXICOLOGICAL INFORMATION

**LIKELY ROUTES OF EXPOSURE:** .....Eye or skin contact; inhalation of mist or aerosol

**TOXICOLOGICAL CHARACTERISTICS:** ..... Vomiting, hypoxemia (reduces O<sub>2</sub> in the blood), metabolic acidosis.

**DELAYED EFFECTS:** .....No data available.

**IMMEDIATE EFFECTS:** .....No data available.

**CHRONIC EFFECTS:** .....Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects. May cause adverse liver effects.

**NUMERICAL MEASURES OF TOXICITY:** .....Unknown acute toxicity is 0.85% of the mixture.

**LISTED CARCINOGEN:** .....No data available

<b>INGREDIENTS</b>	<b>DATA</b>
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Iron trichloride	Oral rat LD50 450 mg/kg
Iron trichloride	Dermal rat LD50 >2000 mg/kg
Hydrogen chloride	Oral rat LD50 700 mg/kg
Hydrogen chloride	Dermal rabbit LD50 5010 mg.kg
Hydrogen chloride	Inhalation rat LC50 3124 ppm 1h
Ferrous chloride	Oral LD50 450

### 12 – ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE AND DISTRIBUTION:** Toxic to aquatic life with long lasting effects

PRODUCT	DATA
Iron trichloride	Fish LC50 20.95-22.56 mg/L 96hours
Iron trichloride	Daphnia magna EC50 mg/L 48 hour

**PERSISTENCE AND DEGRADABILITY:** .....No data available.

**BIOACCUMULATIVE POTENTIAL:** .....No data available.

**MOBILITY IN SOIL:**.....No data available.

**OTHER ADVERSE EFFECTS:** ..No data available.

### 13 –DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** .....This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Do not reuse container. this product contains one or more substances that are listed with the State of California as a hazardous waste. (Iron trichloride 7705-08-0 Toxic/corrosive)

### 14 – TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:**.....Ferric Chloride Solution

**HAZARD CLASS:** .....8,

**UN/NA NUMBER:** .....UN2582

**PACKAGING GROUP :** .....III



### 15 - REGULATIONS

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



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EPA SRA Title III Chemical Listings:

**TSCA (Toxic Substance Control Act) STATUS:** .....All ingredients listed or exempt from listing

**SECTION 311/312:** .....Acute health hazard, chronic health hazard.

**SARA SECTION 313:**.....None of the ingredients are listed.

**US EPA CERCLA:** .....This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Iron trichloride 7705-08-0 (HSRQ) 1000 lbs.

Hydrogen chloride 7647-01-0 (HSRQ) 5000 lbs.

Ferrous chloride 7758-94-3 (HSRQ) 100 lbs.

### 16 – OTHER INFORMATION

#### NFPA HAZARD RANKING

HEALTH	FIRE	REACTIVITY	SPECIAL
3	0	0	

#### HMS HAZARD RANKING

HEALTH	FIRE	REACTIVITY	PPE
3	0	0	

This data is offered in good faith and believed to be accurate, but it is for the users to satisfy themselves of the product suitability for their own purpose. There is no warranty expressed or implied. The recommended hygiene and safe handling procedures are believed to be generally applicable. The information given is designed only as a guidance. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.