



Material Safety Data Sheet



HMIS

Health Hazard	3
Fire Hazard	2
Reactivity	0

PPE (See Section 15)



Section 1. Chemical Product and Company Identification

Trade Name **Metal Extraction Solution** Part # RE2056
 CAS # 64-19-7 / 631-61-8

Manufacturer Haztech Systems, Inc.
 PO Box 929
 Mariposa, CA 95338

RTECS AF1225000 / AF3675000
 TSCA TSCA 8(b) inventory:
 Acetic acid
 Ammonium acetate

Synonyms

Chemical Formula C2H3OOH, CH3COONH4

Supplier Spectrum Chemical Mfg. Corp.
 14422 S. San Pedro St.
 Gardena, CA 90248

CI #

In case of emergency contact CHEMTREC
 (24 hours) at 800-424-9300

HazTech Systems, Inc. 800-543-5487

Spectrum Chemical Mfg. Corp. 310-516-8000

Section 2. Composition and Information on Ingredients

Exposure Limits

Name	CAS #	TWA (mg/m3)	STEL	CEIL (mg/m3)	% by Weight
Acetic acid	64-19-7	10	15		~50%
Ammonium acetate	631-61-8				~50%

Toxicological Data on Ingredients
 Acetic acid: ORAL (LD50): Acute: 3310 mg/kg (Rat). 4960 mg/kg (Mouse). 3530 mg/kg (Rat).
 DERMAL (LD50): Acute: 1060 mg/kg (Rabbit). VAPOR (LC50): Acute: 5620 ppm 1 hours (Mouse).
 Ammonium acetate LD50: Not available. LC50: Not available.

Section 3. Hazards Identification

Potential Acute Health Effects Extremely hazardous in case of skin contact (irritant), of eye contact (irritant). Very hazardous in case of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of inhalation (lung irritant). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.
 TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.
 The substance is toxic to lungs, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, eyes, teeth. The substance may be toxic to blood, kidneys. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Section 5. Fire and Explosion Data

Flammability	Flammable.
Auto-Ignition Temperature	Not applicable.
Flash Point	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not applicable.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder.
Special Remarks on Fire Hazards	Not applicable.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.
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Section 7. Handling and Storage

Precautions	If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes
Storage	Keep in HazCat Kit.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use in a well ventilated area.
Personal Protection	Gloves and goggles.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid	Volatility	Not available
Molecular Weight	Not available	Odor Threshold	Not available
pH (1% Solution in Water)	Acidic	Water/Oil Dist. Coeff.	Not available
Boiling Point	Not available	Ionicity (in Water)	Not available
Melting Point	Not available	Dispersion Properties	Not available
Critical Temperature	Not available	Solubility	Water
Specific Gravity	Not available	Odor	Pungent, vinegar (Strong.)
Vapor Pressure	Not available	Taste	Not available
Vapor Density	Not available	Color	Colorless

Section 10. Stability and Reactivity Data

Stability	Product is stable.	Corrosivity	Highly corrosive in presence of glass, steel, aluminum, zinc, copper.
Instability Temperature	Not available.	Special Remarks on Corrosivity	Reacts violently with strong oxidizing agents.
Conditions of Instability	Not available.	Polymerization	Will not polymerize.
Incompatibility with Various Substances	Not available.		

Section 11. Toxicological Information

Route of Entry	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acetic acid: Acute oral toxicity (LD50): 3310 mg/kg (Rat). Acute dermal toxicity (LD50): 1060 mg/kg (Rabbit). Acute toxicity of vapor (LC50): 5620 1 hour (Mouse).
Chronic Effects on Humans	Causes damage to the following organs: lungs, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, eyes, teeth. May cause damage to the following organs: blood, kidneys.
Other Toxic Effects on Humans	Extremely hazardous in case of skin contact (irritant), of eye contact (corrosive), of inhalation (lung corrosive). Very hazardous in case of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of inhalation (lung irritant).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are more toxic.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal Recycle to process, if possible. Consult your local or regional authorities.

Section 14. Transport Information

DOT Classification Class 8: Corrosive material

Identification Acetic acid solution, 8, UN2790, II

Special Provisions for Transport Not applicable.

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations New York release reporting list: Acetic acid
Rhode Island RTK hazardous substances: Acetic acid
Pennsylvania RTK: Acetic acid
Florida: Acetic acid
Minnesota: Acetic acid
Massachusetts RTK: Acetic acid
New Jersey: Acetic acid
TSCA 8(b) inventory: Acetic acid
CERCLA: Hazardous substances.: Acetic acid: 5000 lbs. (2268 kg)
Pennsylvania RTK: Ammonium acetate
Massachusetts RTK: Ammonium acetate
TSCA 8(b) inventory: Ammonium acetate
CERCLA: Hazardous substances.: Ammonium acetate

California Proposition 65 Warnings

Other Regulation OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other classifications WHMIS (Canada) CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
CLASS E: Corrosive liquid. CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC) R10- Flammable. R35- Causes severe burns. S23- Do not breathe gas/fumes/vapour/spray R36/38- Irritating to eyes and skin.

Section 16. Other Information

Part Number(s) RE2056

References Not available.

Other Special Considerations Not available.

Validated by R. Houghton 10/9/02

Verified by R. Turkington

Call 1-800-543-5487

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Haztech Systems, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.