HAZTE	Mater Mater	rial Safety Dat	a Sheet	Page 1 of 4
SYSTEM	MS, MFPA	HMIS		PPE (See Section 15)
INC		Health Hazard Fire Hazard Reactivity	3 2 0	
Section 1. Cher	nical Product and Company	y Identification		
Trade Name	Metal Extraction	Solution	Part #	RE2056
			CAS #	64-19-7 / 631-61-8
Manufacturer	HazTech Systems, Inc.		RTECS	AF1225000 / AF3675000
	PO Box 929 Mariposa, CA 95338		TSCA	TSCA 8(b) inventory: Acetic acid Ammonium acetate
C			CI #	
Synonyms Chemical Formula	С2Н3ООН, СН3СООNН4	ł		mergency contact CHEMTREC at 800-424-9300
Supplier	Spectrum Chemical Mfg. 14422 S. San Pedro St. Gardena, CA 90248	Corp.		ystems, Inc. 800-543-5487 Chemical Mfg. Corp. 310-516-8000

Section 2. Composition and Information on Ingredients

		Expo	sure Limits		
Name	CAS #	TWA (mg/m3)	STEL	CEIL (mg/m3)	% by Weight
Acetic acid Ammonium acetate	64-19-7 631-61-8	10	15		~50% ~50%
Toxicological Acotic acid:	ODAL (ID50), Acut	· 2210 mg/kg (Dat) 400	n malka (Mana)	2520 mg/lrg (Dat)	

Toxicological	Acetic acid: ORAL (LD50): Acute: 3310 mg/kg (Rat). 4960 mg/kg (Mouse). 3530 mg/kg (Rat).
Data on	DERMAL (LD50): Acute: 1060 mg/kg (Rabbit). VAPOR (LC50): Acute: 5620 ppm 1 hours (Mouse).
Ingredients	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,
Potential Chronic	characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness,
Health Effects	watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally,
	blistering.
	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 E - Reagent MSDS'

Metal	Extraction	Solution
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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.
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 C	Controls Use in a well ventilated area.
Personal Prote	ection Gloves and goggles.

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Section 9. Physical and C	hemical Properti	es		
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	d Reactivity Data	a		
Stability	Product is stable.		Corrosivity	Highly corrosive in presence of glass, steel, aluminum, zinc, copper.
Instability Temperature	Not available.			
Conditions of Instability	Not available.		Special Remarks on Corrosivity	Reacts violently with strong oxidizing agents.
Incompatability with Various Substances	Not available.		Polymerization	Will not polymerize.
Section 11. Toxicological	Information			
Route of Entry		Absorbed through s	kin. Dermal contact. Eye	contact. Inhalation. Ingestion.
Toxicity to Animals				0 mg/kg (Rat). Acute dermal toxicity y of yapor (I C50): 5620 1 hour (Mouse)
Chronic Effects on Humans		(LD50): 1060 mg/kg (Rabbit). Acute toxicity of vapor (LC50): 5620 1 hour (Mouse). Causes damage to the following organs: lungs, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, eyes, teeth. May cause damage to the following		
Other Toxic Effects on Humans		 Bigging of the following organs: blood, kidneys. Extremely hazardous in case of skin contact (irritant), of eye contact (corrosive), inhalation (lung corrosive). Very hazardous in case of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of inhalation (lung irri 		irritant), of eye contact (corrosive), of 1 case of ingestion, .
Special Remarks on Toxicity to Animals Special Remarks on Chronic Effects on Humans Special Remarks on Other Toxic Effects on Humans		Not available. Not available. 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 mayarise.
Toxicity of the Products of Biodegradation	The products of degradation are more toxic.
Special Remarks on the Products of Biodegradation	Not available.
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Metal Extraction Solution

Section 13. Disposal Considerations

Waste Disposal

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

waste Disposai	Recycle to process, il 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 Regul	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 CERCLA: Hazardous substances.: Ammonium acetate	
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.