

**MSDS (Material Safety Data Sheet)
Galena Remover - C1097**

1		Product Identification	
	1	Manufacturer:	
		1 Name:	Angelgilding.com
		2 Street Address:	619 S. Clarence Ave
		3 City, State, and Zip:	Oak Park, IL 60304-1303
		4 24-hour Emergency Number	(708) 383-3340
	2	Product Code(s):	Galena Remover - C1097
	3	Preparer:	
		1 Name:	M. G. King
		2 Phone Number:	(708) 383-3340
		3 Revision Information:	5/27/2008
2		Composition/Information on Ingredients	
		Per Ingredient:	
		1 Synonyms:	IRON(III) chloride hexahydrate
		2 CAS Id:	
		3 Formula:	FeCl3 6H2O
		4 Formula Weight:	270.3
		5 Percent:	27
		6 Hazardous:	
3		Hazards Identification	
	1	Overview:	DANGER! CORROSIVE. CAUSES BURNS TO ANY AREA OF CONTACT. HARMFUL IF SWALLOWED OR INHALED. AFFECTS THE LIVER.
	2	SAF-T-DATA Ratings:	
		1 Health Rating:	3 - Severe (Life)
		2 Flammability Rating:	0 - None
		3 Reactivity Rating:	2 - Moderate
		4 Contact Rating:	3 - Severe (Corrosive)
		5 Protective Equipment:	GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES
		6 Storage Color Code:	White (Corrosive)
	3	Potential Health Effects:	
		1 Inhalation:	Extremely destructive to tissues of the mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.
		2 Ingestion:	Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach. Can cause sore throat, vomiting, diarrhea. Low toxicity in small quantities but larger doses (30 mg/kg) may cause nausea, vomiting and diarrhea. Pink urine discoloration is a strong indicator of iron poisoning. Liver damage, coma and death may follow, sometimes delayed as long as three days.
		3 Skin Contact:	Corrosive. Symptoms of redness, pain, and severe burn can occur.
		4 Eye Contact:	Corrosive. Contact can cause blurred vision, redness, pain and severe tissue burns.
		5 Chronic Exposure:	Repeated ingestion may cause liver damage. Prolonged exposure of the eyes may cause discoloration.
		6 Aggravation of Pre-existing Conditions:	

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4		First Aid Measures	
	1	Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
	2	Ingestion:	If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	3	Skin Contact:	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.
	4	Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
	5	Note to Physician:	
5		Fire Fighting Measures:	
	1	Fire:	Not considered to be a fire hazard. Irritating hydrogen chloride fumes may form in fire
	2	Explosion:	
	3	Fire Extinguishing Media:	Water, dry chemical, foam or carbon dioxide. Do not allow water runoff to enter sewers or waterways.
	4	Special Information:	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.
6		Accidental Release Measures:	Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.
7		Handling and Storage:	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.
8		Exposure Controls/Personal Protection:	
	1	Airborne Exposure Limits:	
		1	OSHA PEL:
		2	ACGIH TLV:
			1 mg/m3 (TWA) soluble iron salt as Fe

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	2	Ventilation System:	A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.
	3	Personal Respirators (NIOSH Approved):	If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
	4	Skin Protection:	Wear protective gloves and clean body-covering clothing.
	5	Eye Protection:	Maintain eye wash fountain and quick-drench facilities in work area. Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible.
9		Physical and Chemical Properties:	
	1	Appearance:	Yellow solution
	2	Odor:	Pungent
	3	Solubility in water:	Complete
	4	Density (g cm-3):	1
	5	pH:	4
	6	% Volatiles by volume @ 21C (70F):	
	7	Boiling Point: °C	100
	8	Melting Point (°C):	0
	9	Vapor Density (Air=1):	
	10	Vapor Pressure (mm Hg):	
	11	Evaporation Rate (BuAc=1):	
10		Stability and Reactivity:	
	1	Stability:	Stable under ordinary conditions of use and storage.
	2	Hazardous Decomposition Products:	Emits toxic fumes of chloride when heated to decomposition.
	3	Hazardous Polymerization:	
	4	Incompatibilities:	Metals, allyl chloride, sodium, potassium. Will react with water to produce toxic and corrosive fumes.
	5	Conditions to Avoid:	Incompatibles.
11		Toxicological Information:	
	1	Oral rat LD50:	316 mg/kg (anhydrous)

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		2	Tumorigen:	
		3	Mutagen:	Investigated
		4	Reproductive effector:	Investigated
		5	Carcinogenicity:	
		6	IARC Category:	
		7	Skin rabbit:	
		8	Eye rabbit:	
		9	Inhalation rat LC50	
12			Ecological Information	
	1		Environmental Fate:	
	2		Environmental Toxicity:	24 Hr LC50 striped bass (fingerling): 6 mg/L (static); 24 Hr LC50 striped bass (larvae): 4 mg/L (static)
13			Disposal Considerations:	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
14			Transport Information:	
	1		Domestic (Land, D.O.T.):	
		1	Proper Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC CHLORIDE)
		2	Hazard Class:	8
		3	UN/NA:	UN3260
		4	Packing Group:	III
		5	Information reported for product/size:	220 lb
	2		International (Water, I.M.O.):	
		1	Proper Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC CHLORIDE)
		2	Hazard Class:	8
		3	UN/NA:	UN3260
		4	Packing Group:	III
		5	Information reported for product/size:	220 lb
	3		International (Air, I.C.A.O.):	
		1	Proper Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC CHLORIDE)
		2	Hazard Class:	8
		3	UN/NA:	UN3260
		4	Packing Group:	III
		5	Information reported for product/size:	220 lb
15			Regulatory Information:	
	1		TSCA:	Y
	2		EC:	Y

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	3	Japan:	Y
	4	Australia:	Y
	5	Korea:	Y
	6	Canada	Y
	7	Chemical Weapons Convention:	N
	8	Known to the State of California to cause cancer (Y/N):	N
	9	Australian Hazchem Code:	2R
	10	Poison Schedule:	
	11	Controlled Products Regulations:	
16		Other Information	
	1	NFPA Ratings:	
		1 Health:	2
		2 Flammability:	0
		3 Reactivity:	0
	2	Label Hazard Warning:	DANGER! CORROSIVE. CAUSES BURNS TO ANY AREA OF CONTACT. HARMFUL IF SWALLOWED OR INHALED. AFFECTS THE LIVER.
	3	Label Precautions:	Do not get in eyes, on skin, or on clothing. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
	4	Label First Aid:	In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. In all cases get medical attention immediately.
	5	Product Use:	Commercial mirroring
	6	Disclaimer:	

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