Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier	
Product Identity	Galena Remover – C1097
Alternate Names	Galena Remover – C1097
Unique Formula Identifier	
1.2. Relevant identified uses of the substance or mixt	ure and uses advised against
Intended use	Commercial mirroring.
1.3. Details of the supplier of the safety data sheet	
Company Name	Angel Gilding
	1945 Gardner Road
	Broadview IL 60155
Customer Service: Angel Gilding	USA 708-383-3340
1.4. Emergency telephone number	
Emergency	
24 hour Emergency Telephone No.	708-383-3340

Section 2. Hazard identification of the product

2.1. Classification of the substance or mixture

Classification according to REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006

Skin Irrit. 2;H315	Causes skin irritation.
Eye Dam. 1;H318	Causes serious eye damage.

2.2. Label elements

According to REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006



H315 Causes skin irritation.

H318 Causes serious eye damage.

[Prevention]:

P264 Wash thoroughly after handling.

P280 Wear protective gloves, eye protection, face protection.

[Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.

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, doctor or physician.

P321 Specific treatment (see information on this label).

P332+313 IF SKIN IRRITATION OCCURS: Get medical advice or attention.

P362 Take off contaminated clothing and wash before reuse.

[Storage]:

No CLP storage statements

[Disposal]:

No CLP disposal statements

2.3. Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

3.2. Mixtures

If the product contains substances that present a hazard according to Regulation (EC) No. 1272/2008 [CLP/GHS] (as amended by (EU) 2015/830 and REGULATION (EU) 2020/878), they are listed below.

Ingredient/Chemical Designations	Weight %	EC No. 1272/2008 Classification*	Notes
Ferric chloride CAS Number: 0007705-08-0 EC No. 231-729-4 Index No.:	1 - 5	Acute Tox. 4;H302 Skin Corr. 1B;H314 Aquatic Chronic 3;H412 Eye Dam. 1;H318	Chronic M-Factor: 1

[^]CLP 31</sup> Reference EC No. 1272/2008 1.1.3.1. Notes relating to the identification, classification and labelling of substances (Table 3.1).

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Еуе	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	 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. 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. Skin Contact: Corrosive. Symptoms of redness, pain, and severe burn can occur. Eye Contact: Corrosive. Contact can cause blurred vision, redness, pain and severe tissue burns. Chronic Exposure: Repeated ingestion may cause liver damage. Prolonged exposure of the eyes may cause discoloration. Treat symptomatically. See section 2 for further details.
Eye	Causes serious eye damage.
Skin	Causes skin irritation.
4.3. Indication of any ir	nmediate medical attention and special treatment needed
Notes to physician	Treat symptomatically.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Water, dry chemical, foam or carbon dioxide. Do not allow water runoff to enter sewers or waterways.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Emits toxic fumes of chloride when heated to decomposition

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Not considered to be a fire hazard. Irritating hydrogen chloride fumes may form in fire.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

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.

6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

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.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Metals, allyl chloride, sodium, potassium. Will react with water to produce toxic and corrosive fumes.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0007705-08-0	Ferric chloride	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

8.2. Exposure controls

Respiratory

If the exposure limit is exceeded and engineering controls are not feasible, a half face piece 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 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, glycerin, 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-face piece positive pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Eyes	Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.
Skin	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.
See section 2 for further	details.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Color: Yellow Solution Physical State: Liquid
Odor	Pungent
Odor threshold	Not determined
pH	4
, Melting point / freezing point	0 °C
Initial boiling point and boiling range	100 °C
Flash Point	Not Measured
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured
	Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Relative Density	Not Measured
Solubility in Water	Complete
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	
	Not Measured
Viscosity (cSt)	Not Measured Not Measured
Viscosity (cSt)	Not Measured
Viscosity (cSt) Density	Not Measured

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Incompatibles.

10.5. Incompatible materials

Metals, allyl chloride, sodium, potassium. Will react with water to produce toxic and corrosive fumes.

10.6. Hazardous decomposition products

Emits toxic fumes of chloride when heated to decomposition

Section 11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ferric chloride - (7705-08-0)	No data	No data	No data	No data	No data
	available	available	available	available	available

Carcinogen Data

CAS No.	Ingredient	Source	Value				
0007705-08-0	Ferric chloride	OSHA	Regulated Carcinogen: No				
		NTP	Known: No	; Suspected: No			
		IARC	Group 1: N	lo; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;			
		ACGIH	No Establis	shed Limit			
Classificatio	on	Ca	tegory	Hazard Description			
Acute toxicity	y (oral)		Not Applicable				
Acute toxicity	y (dermal)			Not Applicable			
Acute toxicity	y (inhalation)			Not Applicable			
Skin corrosic	on/irritation		2 Causes skin irritation.				
Serious eye	damage/irritation		1	Causes serious eye damage.			
Respiratory s	sensitization			Not Applicable			
Skin sensitiz	ation			Not Applicable			
Germ cell mu	utagenicity		Not Applicable				

Carcinogenicity	 Not Applicable
Reproductive toxicity	 Not Applicable
STOT-single exposure	 Not Applicable
STOT-repeated exposure	 Not Applicable
Aspiration hazard	 Not Applicable

11.2.1 Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

Section 12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l	3hr IC50 Bacteria mg/l	Biodegradability %
Ferric chloride - (7705-08-0)	Not Available	Not Available	Not Available		

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6 Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

12.7. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable Sub Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air class: Not Applicable Sub Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5 Environmental horordo			

14.5. Environmental hazards

IMDG Marine Pollutant: No;

14.6. Special precautions for user

Not Applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Legislation

REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

National Legislation

None noted.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16. Other information

SDS Revision Date 03/24/2021

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

IMPORTANT NOTE: This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or any process. Final determination of suitability of any material is the sole responsibility of the user.

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