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1. Identification

1.1. Product identifier

Product IdentityGold Remover Part A – C1010 **Alternate Names**Gold Remover Part A – C1010

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use Commercial mirroring.

Application Method See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name Angel Gilding

1945 Gardner Road

Broadview IL 60155 USA

Emergency

24 hour Emergency Telephone No. 708-383-3340 **Customer Service: Angel Gilding** 708-383-3340

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Corr. 1B;H314 Causes severe skin burns and eye damage.

Eye Dam. 1;H318 Causes serious eye damage.

2.2. Label elements



Danger

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

[Prevention]:

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

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

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P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Iron chloride (FeCl3), hexahydrate CAS Number: 0010025-77-1	10 - 25	Acute Tox. 4;H302 Skin Corr. 1B;H314 Aquatic Chronic 3;H412 Skin Irrit. 2;H315 Eye Dam. 1;H318	[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.

- [1] Substance classified with a health or environmental hazard.
- [2] Substance with a workplace exposure limit.
- [3] PBT-substance or vPvB-substance.

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.

Eyes 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.

^{*}The full texts of the phrases are shown in Section 16.

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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. See section 2 for further details.

Eyes Causes serious eye damage.

Skin Causes severe skin burns and eye damage.

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.

Do not breathe dust / fume/ mist / vapors / spray.

5.3. Advice for fire-fighters

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.

Not considered to be a fire hazard. Irritating hydrogen chloride fumes may form in fire.

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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.

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7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

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

7.2. Conditions for safe storage, including any incompatibilities

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.

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.

8. Exposure controls and personal protection

8.1. Control parameters

CAS No.	Ingredient	Source	Value
0010025-77-1	Iron chloride (FeCl3), hexahydrate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

8.2. Exposure controls

Respiratory

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.

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 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

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maintain concentrations of particulates and any vapor below occupational exposure limits

suitable respiratory protection must be worn.

Other Work Practices Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing

apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. 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.

9. Physical and chemical properties

AppearanceYellow brown solution LiquidOdorSlight odor of hydrochloric acid

Odor threshold Not determined PH Not Measured

Melting point / freezing point 0°C

Initial boiling point and boiling range100 °C (212 °F)Flash PointNot MeasuredEvaporation rate (Ether = 1)Not MeasuredFlammability (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 **Specific Gravity** 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 **Density** 1.1 (g cm-3) 21°C (70°F):

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

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10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Incompatible materials.

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.

11. Toxicological information

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 Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Iron chloride (FeCl3), hexahydrate - (10025-77-1)	900.00, Rat - Category: 4	No data available	No data available	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value		
0010025-77-1	Iron chloride (FeCl3), hexahydrate	OSHA	Regulated Carcinogen: No		
		NTP	Known: No; Suspected: No		
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		

Classification	Category	Hazard Description
Acute toxicity (oral)		Not Applicable
Acute toxicity (dermal)		Not Applicable
Acute toxicity (inhalation)		Not Applicable
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization		Not Applicable
Skin sensitization		Not Applicable
Germ cell mutagenicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive toxicity		Not Applicable
STOT-single exposure		Not Applicable
STOT-repeated exposure		Not Applicable
Aspiration hazard		Not Applicable

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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,	48 hr EC50 crustacea,	ErC50 algae,	
	mg/l	mg/l	mg/l	
Iron chloride (FeCl3), hexahydrate - (10025-77-1)	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. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

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

14. Transport information

DOT (Domestic Surface IMO / IMDG (Ocean ICAO/IATA Transportation) Transportation) 14.1. UN number UN3264 UN3264 UN3264 Corrosive liquid, acidic, 14.2. UN proper UN3264, Corrosive liquid, acidic, Corrosive liquid, acidic, shipping name inorganic, n.o.s., (Ferric Chloride inorganic, n.o.s., (Ferric inorganic, n.o.s., (Ferric Solution), 8, III Chloride Solution) Chloride Solution) 14.3. Transport **DOT Hazard Class: 8** IMDG: 8 Air Class: 8 hazard class(es) Sub Class: Not Applicable 14.4. Packing Ш Ш Ш group

14.5. Environmental hazards

IMDG Marine Pollutant: No;

14.6. Special precautions for user

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No further information

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected

regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA

Inventory. **WHMIS 1988**

D2B E

Classification

US EPA Tier II Hazards Fire: No

Sudden Release of Pressure: No

Reactive: No Immediate (Acute): Yes Delayed (Chronic): No

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

16. Other information

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

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eve 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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