

Product# 2027-S/2033-S

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Hydrogen Tetrachloro Aurate (III) Solution

Product Code: 2027-S/2033-S

Company: Colonial Metals, Inc.
 Building 20
 505 Blue Ball Road
 Elkton, MD 21921 United States
 Company Contact: EHS Director
 Telephone Number: 410-398-7200
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 Web Site: www.colonialmetals.com



www.colonialmetals.com

Emergency Response: Supplier Emergency Contacts & Phone Number
 Chemtrec: 800-424-9300
 World Wide - Call COLLECT to U.S: 703-527-3887

Section 2: Hazards Identification

GHS07

GHS05

BLANK

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Hazard Pictograms:



Signal Word: Danger

Hazard Category: Corrosive to metals Cat 1
 Skin corrosion/irritation Cat 1
 Acute tox, oral Cat 4
 Acute tox, inh. Cat 4

Hazard Statements: H290: May be corrosive to metals
 H314: Causes severe skin burns and eye damage
 H302: Harmful if swallowed
 H332: Harmful if inhaled

P260: Do not breathe dust/fume/gas/mist/vapours/spray
 P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated
 P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove
 P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P405: Store locked up

P501: Dispose of contents/container in accordance with local/regional/national/international rules.

None known

Hazards not otherwise classified:

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Hydrogen Tetrachloro Aurate (III) Solution	Danger	16903-35-8	

Section 4: First Aid Measures

General Info: Ensure proper ventilation.

Notable Exposure symptoms: Irritation to skin, eyes and areas of contact.

If ingested: Rinse mouth. Seek immediate medical attention. Clear the airway and administer artificial respiration if not breathing.
If swallowed, do not induce vomiting unless directed to do so by medical personnel.

If inhaled: Remove the victim from the contaminated area while protecting yourself from exposure by wearing an appropriate respirator. Put a similar respirator on the victim if possible. Get medical attention immediately.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Get medical attention if irritation develops or persists.

Skin contact: Take off immediately all contaminated clothing. Rinse with water thoroughly. Get medical advice if irritation develops or persists.

Additional Info: Observe for any symptoms for several hours after exposure. Follow up with medical attention if symptoms develop.

Section 5: Fire Fighting Measures

General Info: Use proper safety equipment. If this product is involved in a fire Hydrogen chloride and metal oxide fume can be released.

Extinguishing Method / Equipment: Product is not flammable, Use firefighting methods suitable to fight surrounding fires

Hazardous Decomposition Info: Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing apparatus and full protective gear.

Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment (SCBA) and clothing during clean-up. Avoid breathing vapor. Ventilate area if easy to do so and wash spill site after clean up is complete. Contact local authorities if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Containment Equipment and Procedures: Large Spills: Dike major spills. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose contaminated material as waste. Ensure adequate ventilation

Cleanup Procedures: Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning surface is necessary, utilize vacuum cleaner, provided adequate ventilation is available.

Section 7: Handling and Storage

Safe Handling Precautions: Do not handle until all safety precautions have been read and understood. Keep containers tightly closed Ensure adequate ventilation. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling.

Work/Hygienic Practices: Always use good personal hygiene after handling

Recommendations for Storage: Store in the dark. Store away from strong bases. Water reacts with many metals to give hydrogen, often violently. Water is also incompatible with many reactive organic and inorganic chemicals. Store away from

Other Precautions: 0.01 ppm high efficiency particular respirator/supplied air respirator/self-contained breathing apparatus; 0.2 ppm same as above with full face piece; 1 ppm powdered air purifying respirator with high efficiency filter/type C supplied air respirator operated in pressure demand mode. Store in a sealed container, plastic or plastic liner, in a cool, well ventilated, dry area away from volatile acids.

Section 8: Exposure Control / Personal Protection

General / Engineering Ventilation: Local Exhaust: Required in handling area
Controls: Mechanical: Desirable to insure concentration of material below TLV/TWA levels
 Other: Closed ventilation system (Laboratory Fume Hood)

Work Clothing: Protective work clothing which covers skin and prevents exposures. Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing.

Eye/face protection: Wear safety glasses with side shields or goggles or face shield.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: NIOSH approved chemical cartridge respirator for acid gas/chlorine (42 CFR part 84) and self-contained breathing apparatus with full face shield.

Additional Information: Hydrochloric Acid (10%) (7647-01-0)
 PEL (USA), Ceiling limit value: 7 mg/m3, 5 ppm
 REL (USA), Ceiling limit value: 7 mg/m3, 5 ppm
 TLV (USA), Ceiling limit value: 2.98 mg/m3, 2 ppm
 EL (Canada), Short-term value: C 2 ppm

Section 9: Physical and Chemical Properties

State: Liquid	Melting Point: N/A	Freezing Point: N/A
Color: Yellow to Orange Liquid	Boiling Point/Range: 212 °F 100 °C	pH: Acidic
Molecular Wt. 339.79	Odor: Pungent Odor	Water Solubility: easily soluble in cold and hot water, Corrosive
Evaporation rate: N/A	Flash Point: N/A	Part. Coeff (n-octanol/water Vapor Pressure): 23 hPa (17 mmHg)
Upper Flam Limits: N/A	Lower Flam Limits: N/A	Autoignition Temp: N/A
VOC Content (lbs/gal): N/A	Viscosity: N/A	
Specific Gravity: N/A		

Section 10: Stability and Reactivity

General: This product is stable and non-reactive under normal conditions of use. Product is not subject to hazardous polymerization. Avoid open flame and ignition sources. Conditions To Avoid (Stability) Elevated temperature.

Incompatible materials: Bases, Ammonia, Light, Water reacts with many metals to give hydrogen, often violently. Water is also incompatible with many reactive organic and inorganic chemicals.

Decomposition products: Hydrogen chloride, Metal oxide fume
 Decomposition will not occur if used and stored according to specifications

Section 11: Toxicological Information

General Information: Harmful if swallowed. Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach. The RTECS contains acute toxicity data for this product

Toxicological Information (product): To the best of our knowledge, the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated.

Likely Routes of Exposure: Eye Contact
Skin Contact
Inhalation
Ingestion - possible, but considered unlikely.

Toxicological Information (contained substances)

Carcinogenicity or mutagenicity: No data available
Sensitization: Product is not expected to be a sensitizer.

Section 12: Ecological Information

General information: This product is manufactured in accordance to and in compliance with all aspects of the Toxic Substances Control Act (TSCA) and that all compounds are on the TSCA inventory; This product is also in compliance with the New Substances Notification Regulations (NSNR) and all ingredients are on the DSL/NDSL.

Aquatic toxicity: No Data Available

Degradation / Mobility info: No specific data available.

Bioaccumulative potential: No specific data available.

Section 13: Disposal Information

Product disposal: Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation

Container disposal: Treat empty containers with extra care. Consult waste contractor.

Other considerations: NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.

Section 14: Transport Information

DOT: Proper Shipping Name
Corrosive liquid acidic, inorganic, n.o.s. (Hydrogen Tetrachloro Aurate (III))

Hazard Class

8

DOT Identification Number

UN3264

DOT Shipping Label

Corrosive liquid

Packaging Requirements

III

IMO/IMDG: Inquire for further transport information.

IATA: Same as DOT, always consult IATA manual before shipping

OTHER: Inquire for further transport information.

Section 15: Regulatory Information

TSCA: All ingredients of this product are listed or are excluded from listing under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SARA Section 313 Notification: 7647-01-0 Hydrochloric Acid

Canadian Regulatory Information: This product is listed in the DSL

European Union (EU) Regulatory Information: R20/21/22 - Harmful by inhalation, in contact with skin, and if swallowed
R36/37/38 - Irritating to eyes, respiratory system and skin
S14 - Keep away from strong oxidizers.
S7/9 - Keep container tightly closed and in a well-ventilated place
S36/37/39 - Wear suitable protective clothing, gloves, and eye/face protection

Other International Regulations: EINECS Number - 240-948-4

Section 16: Other Information

NFPA Rating

Health: 3
Fire: 0
Reactivity: 1
Other: COR

HMIS Rating

Health: 3
Fire: 0
Reactivity: 1
Personal
Protection: J

***Disclaimer:** In compliance with the OSHA Hazard communication Standard, 2.9 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.*

It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.

Colonial Metals, Inc. makes no presentation as to the accuracy of the information in the MSDS. The information is believe to be correct; however, you (the customer), should preform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.

Colonial Metals, Inc.

SDS Author: John Kerchner

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