

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Gold(III) Chloride Hydrate

Product Code: AU3-CL-04.XHYD

CAS Number: 27988-77-8

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551 Fax: +1 310-208-0351 Emergency telephone number: +1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Classification EC 67/548 or EC 1999/45
Classification : C; R34
R43
Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)
Health hazards : Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314
Skin sensitisation - Category 1 - Warning (CLP : Skin Sens. 1) H317
2.2. Label elements
Labelling EC 67/548 or EC 1999/45

Symbol(s) êC Symbol(s) : C : Corrosive R Phrase(s) : R34 : Causes burns. R43 : May cause sensitization by skin contact. S Phrase(s) : S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection. S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible). Labelling Regulation EC 1272/2008 (CLP) Hazard pictograms M» MÄ Signal words : Danger Hazard statements : H314 : Causes severe skin burns and eye damage. H317 : May cause an allergic skin reaction. Precautionary statements • Prevention : P280: Wear protective gloves, protective clothing, eye protection, face protection. P260: Do not breathe dust, fume, gas, mist, Vapors, spray. P264: Wash thoroughly after handling. P272: Contaminated work clothing should not be allowed out of the workplace. • Response : P302+P352: IF ON SKIN : Wash with plenty of soap and water. P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting. P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing. P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower. P333+P313: If skin irritation or rash occurs : Get medical advice. P363: Wash contaminated clothing before reuse. • Storage : P405: Store locked up. • Disposal considerations : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Preparation : CHLOROAURIC ACID CAS No :16903-35-8 Substance. Contains no other components or impurities which will influence the classification of the product.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

Skin contact : If skin irritation or rash occurs : Wash contaminated clothing before reuse. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap

and water. Specific treatment (see on this label). Get medical advice. Immediately call a POISON CENTER or doctor.

Eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Ingestion : Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.

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

Symptoms relating to use : Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

Thermal decomposition generates : Corrosive Vapors.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

6.3. Methods and material for containment and cleaning up

Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Wash thoroughly after handling. Wash contaminated clothing before reuse. Do not breathe dust, fume, gas, mist, Vapors, spray. Contaminated work clothing should not be allowed out of the workplace.

Technical protective measures : Provide good ventilation in process area to prevent formation of Vapor.

7.2. Conditions for safe storage, including any incompatibilities : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

Storage regulation : Comply with applicable regulations.
Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.
7.3. Specific end use(s)
Specific end use(s) : None.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

- Respiratory protection : Wear approved mask.
- Hand protection : Wear protective gloves.
- Skin protection : Wear suitable protective clothing.
- Eye protection : Chemical goggles or face shield.
- Others : When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Physical state at 20 °C : Solid. Colour : Yellow crystalline Odor : N/A Odor threshold : No data available. pH value : N/A Melting point [°C] : No data available. Decomposition point [°C] : N/A Critical temperature [°C] : N/A Auto-ignition temperature [°C] : N/A Flammability (solid, gas) : N/A Flash point [°C] : N/A Boiling point [°C] : N/A Initial boiling point [°C] : N/A Final boiling point [°C] : N/A Evaporation rate : N/A Vapor pressure [20°C] : N/A Vapor pressure mm/Hg : N/A Vapor density : N/A Density [g/cm3] : 3,9 Relative density, gas (air=1) : N/A Relative density, liquid (water=1) : N/A Solubility in water [% weight] : N/A Solubility in water : N/A Log Pow octanol / water at 20°C : No data available. Solubility : N/A Viscosity at 40°C [mm2/s] : N/A 9.2. Other information Explosive properties : N/A Explosion limits - upper [%] : N/A Explosion limits - lower [%] : N/A Oxidising properties : No data available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity : Not established.
10.2. Chemical stability
Chemical stability : Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions
Hazardous reactions : Not established.
10.4. Conditions to avoid
Conditions to avoid : Direct sunlight. Extremely high or low temperatures.
10.5. Incompatible materials
Materials to avoid : Strong acids. Strong bases.
10.6. Hazardous decomposition products
Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.
Thermal decomposition generates : Corrosive Vapors.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

• Inhalation : Based on available data, the classification criteria are not met.

• Dermal : Based on available data, the classification criteria are not met.

• Ingestion : Based on available data, the classification criteria are not met.

Corrosion : Causes severe skin burns and eye damage.

Irritation : Based on available data, the classification criteria are not met.

Sensitization : May cause an allergic skin reaction.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity
Toxicity information : Not established.
12.2. Persistence - degradability
Persistence - degradability : Biodegradable.
12.3. Bioaccumulative potential
Bioaccumulative potential : Not established.
12.4. Mobility in soil
Mobility in soil
Mobility in soil : Not established.
12.5. Results of PBT and vPvB assessment
Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB
substance according to Annex XIII of Regulation REACH.
12.6. Other adverse effects
Environmental precautions : Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methodsGeneral : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14. TRANSPORT INFORMATION

14.1. Land transport (ADR-RID) Proper shipping name : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. UN N° : 3260 H.I. nr : 80 ADR - Class: 8 Labelling - Transport : 8 : Corrosive substance. { ADR - Classification code : C2 ADR - Group : III ADR - Packing instructions : P002 R001 LP002 ADR - Limited Quantity : 5 KG ADR - Tunnel code : E : Passage forbidden through tunnels of category E. ""**»**●'" 14.2. Sea transport (IMDG) [English only] Proper shipping name : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. UN N° : 3260 IMO-IMDG - Class or division : 8 : Corrosive substance. IMO-IMDG - Packing group : III IMO- IMDG - Packing instructions : P002 LP02 IMO-IMDG - Limited quantities : 5 kg IMO-IMDG - Marine pollution : No EMS-Nr: F-A S-B 14.3. Air transport (ICAO-IATA) [English only] Proper shipping name : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. UN N° : 3260 IATA - Class or division : 8 : Corrosive substance. IATA - Packing group : III IATA - Passenger and Cargo Aircraft : ALLOWED - Passenger and Cargo - Packing : 860 instruction - Passenger and Cargo - Maximum : 25 kg Quantity/Packing IATA - Cargo only : ALLOWED - Cargo only - Packing instruction : 864 - Cargo only - Maximum Quantity/: 100 kg Packing IATA - Limited Quantites : 5 kg ERG-Nr:8L

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Safety, health and environmental : Ensure all national/local regulations are observed. regulations/legislation specific for the substance or mixture
REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.
REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.
15.2. Chemical Safety Assessment
Chemical Safety Assessment : It has not been carried out.

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.