

SAFETY DATA SHEET

Create Date: 2021-10-15

SECTION 1: COMPANY AND PRODUCT INFORMATION

1.1 Product identifiers

Product name : Gold(III) chloride trihydrate

Cat. number : ZXB-06-142

CAS number : 16961-25-4

Synonyms : Tetrachloroauric(III) acid, Hydrogen tetrachloroaurate(III)

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

Identified uses : Laboratory chemicals, manufacture of substances. It is for research purposes only.

1.3 Details of the supplier of the safety data sheet

Address : Hinter den Gärten
5689173 Lonsee
Germany

Email : info@zellx.de

Phone : +49(0)731 55211521

Fax : +49(0)731 55211719

1.4 Emergency telephone number

Emergency phone : +49(0)731 55211521

SECTION 2: HAZARDS IDENTIFICATION


2.1 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion (Sub-category 1B), H314

Serious eye damage (Category 1), H318

Skin sensitization (Sub-category 1A), H317

2.2 Label elements and precautionary statements

Pictogram : 

Signal word : Danger

Hazard statement(s) : H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

Precautionary statement(s)

: P260 Do not breathe dusts or mists.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance	CAS#	EC#	Concentration
Gold(III) chloride trihydrate M.F: H ₂ AuCl ₄ · 3H ₂ O M.W: 393,83 g/mol	16961-25-4	240-948-4	≤ 99.9 %

3.2 Hazardous components & classification

Skin corrosion (Sub-category 1B), H314

Serious eye damage (Category 1), H318

Skin sensitization (Sub-category 1A), H317

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

In case of inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Immediately rinse out with water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Remove contact lenses. Consult a physician.

In case of ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water and drink plenty of water (two glasses at most), avoid vomiting (risk of perforation). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2). And /or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Not available

SECTION 5: FIRE FIGHTING MEASURES

5.1 Conditions of flammability:

Not combustible

5.2 Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.3 Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.4 Special hazards arising from the substance

Nature of decomposition products is not known. Ambient fire may liberate hazardous vapours.

5.5 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.6 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert

For personal protection see section 8

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

For proper disposal see section 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Always wear personal protective equipment (PPE)

For precautions see section 2

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Store at RT

Light sensitive. Moisture sensitive.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters.

8.2 Engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

8.3 Personal protective equipment

Eye/face protection	: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Body protection	: Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) or DIN 14387 respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	: Yellow
b) Physical states	: Solid
c) Odor	: Not available
d) Odor threshold	: Not available
e) Melting point	: Not available.
f) Boiling point range	: Not available
g) pH	: Not available
h) Density	: Not available
i) Flash point	: Not available
j) Evaporation rate	: Not available
k) Flammability	: Not available
l) Upper/lower flammability or explosive limits:	: Not available
m) Vapor pressure	: Not available
n) Vapor density	: Not available
o) Relative density	: Not available
p) Solubility	: Not available
q) Partition coefficient:n-octanol/water	: Not available
r) Auto-ignition temperature	: Not available
s) Decomposition temperature	: Not available
t) Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not available

10.2 Chemical stability

Stable under standard ambient conditions condition.

10.3 Possibility of hazardous reactions

Not available

10.4 Conditions to avoid

Do not Exposure to moisture

Not available

10.5 Incompatible materials

Reducing agents, Metals, Strong oxidizing agents and must be avoided.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Unknown

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute toxicity

Not available

11.2 Skin corrosion/irritation

Not available

11.3 Respiratory or skin sensitization

Not available

11.4 Serious eye damage/irritation

Not available

11.5 Germ cell mutagenicity

Not available

11.6 Carcinogenicity

IARC : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

11.7 Reproductive toxicity

Not available

11.8 Specific target organ toxicity – single exposure

Not available

11.9 Specific target organ toxicity – repeated exposure

Not available

11.10 Aspiration hazard

Not available

11.11 Likely routes of exposure

Respiratory organs, mouth, skin, and eyes.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No toxicity data available

12.2 Persistence and degradability

No persistence and degradability data available

12.3 Bioaccumulative potential

No bioaccumulative potential data available

12.4 Mobility in soil

No nobility in soil data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

12.6 Other adverse effect

No other adverse effect data available

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of product in accordance with local rules and regulations

SECTION 14: TRANSPORTATION INFORMATION

14.1 Un Number

3260

14.2 UN proper shipping name

Corrosive solid, acidic, inorganic, n.o.s. (Hydrogen tetrachloroaurate(III) trihydrate)

14.3 Transport hazard class(es)

8

14.4 Packing group

II

14.5 Environmental hazards

N/A

SECTION 15: REGULATORY INFORMATION

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

Not applicable

15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for the substance or the mixture of this product

SECTION 16: OTHER INFORMATION

16.1 Disclaimer

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16.2 Preparation Information

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