

SAFETY DATA SHEET

Date Printed: 05/20/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: Gold Conductor Paste

Product Code: AU-M-01-PST

CAS Number: 7440-57-5

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

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

GHS Pictograms



GHS Categories:

GHS02: Flammable

GHS07: Irritant

GHS08: Health Hazard

Signal Word: DANGER

Hazard Statements:

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

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

P303+P361+P353 If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P405 Store locked up.

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

Health Effects:

NFPA Hazard Rating: Health: 2; Fire: 3; Reactivity: 0

HMIS® Hazard Rating: Health: 2; Fire: 3; Reactivity: 0

(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment: A chemical safety assessment has not been carried out.

PBT: ND

vPvB: ND

Emergency overview:

Appearance: Golden brown liquid/paste.

Immediate effects: Irritation.

Potential health effects

Primary Routes of entry: Skin and eye contact, inhalation.

Signs and Symptoms of Overexposure:

Eyes: Causes eye irritation.

Skin: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: ND

Inhalation: Causes respiratory irritation.

Chronic Exposure: May cause damage to organs through prolonged or repeated exposure.

Chemical Listed As Carcinogen or Potential Carcinogen: No

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Gold

Cas. No.: 7440-57-5

70-75%

toluene

Cas. No.: 108-88-3

10-25%

ethyl acetate

Cas. No.: 141-78-6

2.5-5%

ethanol denatured

Cas. No.: 64-17-5

2.5-5%

cellulose, nitrate

Cas. No.: 9004-70-0

2.5-5%

propan-2-ol

Cas. No.: 67-63-0

≤2.5%

bornan-2-one

Cas. No.: 76-22-2
≤2.5%
(R)-p-mentha-1, 8-diene
Cas. No.: 5989-27-5
≤1.0%

SECTION 4. FIRST AID MEASURES

If accidental overexposure is suspected

Eye(s) Contact: Rinse opened eye for several minutes under running water.

Skin Contact: Immediately wash with soap and water; rinse thoroughly.

Inhalation: Supply fresh air and call for a doctor.

Ingestion: If symptoms persist, consult a doctor.

Note to physician

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

SECTION 5. FIREFIGHTING MEASURES

Flash Point: 4° C (39° F)

Flammable Limits: Lower: 1.2 Vol % Upper: 7.0 Vol %

Auto-ignition point: Product is not self-igniting.

Fire Extinguishing Media: CO₂, sand, or extinguishing powder. Do not use water or water with full jet.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full protective gear.

Unusual Fire and Explosion Hazards: ND

Hazardous combustion products: Carbon dioxide/carbon monoxide.

DOT Class: Flammable liquid.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled: Use personal protective equipment.

Keep unprotected persons away. Ensure adequate ventilation. Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective clothing.

Environmental precautions: Prevent seepage into sewage system, work pits, and cellars.

Inform respective authorities in case of seepage into water courses, or sewage systems. Do not allow to enter sewers/surface or groundwater.

Methods and materials for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust.) Dispose contaminated material as waste according to section 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

SECTION 7. HANDLING AND STORAGE

Precautions to be taken in Handling and Storage: Ensure adequate ventilation/exhaustion at the workplace. Prevent formation of aerosols. Keep ignition sources away – Do not smoke. Protect against electrostatic charges. Store in a cool location. Store away from food stuffs. Keep receptacle tightly

sealed. Prevent from drying out.
Storage temperature: Ambient or lower.
Storage Pressure: ND

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with biological limit values:

108-88-3 toluene

BEI

0.02 mg/L

Medium: blood

Time: prior to last shift of workweek

Parameter: toluene

0.03 mg/L

Medium: urine

Time: end of shift

Parameter: toluene

0.3 mg/g creatinine

Medium: urine

Time: end of shift

Parameter: o-Cresol with hydrolysis (background)

67-63-0 propan-2-ol

BEI

40 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Acetone (background, nonspecific)

Engineering Controls

Ventilation required: Ensure adequate ventilation.

Personal Protection Equipment

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
Filter A2B2P3.

Protective gloves: Only use chemical protective gloves with CE-labeling of category III.

After use of gloves apply skin-cleaning agents and skin cosmetics.

Skin protection: Appropriate protective clothing.

Eye protection: Tightly sealed goggles.

Additional clothing and/or equipment: Eye wash facility available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Physical State: Gold brown liquid/paste.

Odor (threshold): Mild

Specific Gravity (H₂O=1): ND

Vapor Pressure (mm Hg): 29 hPa (22 mm Hg)

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND

Boiling Point: 75 °C (167 °F)

Freezing point / melting point: ND

pH: ND

Solubility in Water: Not miscible or difficult to mix.

Molecular Weight: ND

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Conditions to Avoid: ND

Materials to Avoid (Incompatibility): Strong oxidizers, acids, and alkalis.

Hazardous Decomposition Products: None known.

Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Primary irritant effect:

On the skin: Irritant to skin and mucous membranes.

On the eye: No irritating effect.

Sensitization: Sensitization possible through skin contact.

Human experience: ND

This product does contain compounds listed by NTP or IARC or regulated by OSHA as carcinogen: toluene (108-88-3), ethanol denatured (64-17-5) propan-2-ol, (67-63-0) (R)-p-mentha-1, 8-diene (5989-27-5)

SECTION 12. ECOLOGICAL INFORMATION

Remark: Harmful to fish.

Water hazard class 2: Do not allow product to reach groundwater, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms.

Chemical Fate Information: ND

SECTION 13. DISPOSAL CONSIDERATIONS

RCRA 40 CFR 261 Classification: Ethyl Acetate (141-78-6): U112; Toluene (108-88-3): U220. Can be recycled to recover precious metal. Federal, State and local laws governing disposal of materials can differ. Must not be disposed of together with household garbage. Ensure proper disposal compliance with proper authorities before disposal.

SECTION 14. TRANSPORT INFORMATION

US DOT Information: Proper shipping name: Flammable liquids, n.o.s. (Toluene, Ethyl acetate)

Hazard Class: 3

Packaging group: II

UN Number: UN1993

IATA: Proper shipping name: Flammable liquids, n.o.s. (Toluene, Ethyl acetate)

Hazard Class: 3

Packing group: II

UN Number: UN1993

IMO: Proper shipping name: Flammable liquids, n.o.s. (Toluene, Ethyl acetate)
Class: 3
UN Number: 1993
Packing group: III
EMS: F-E, S-E
Marine Pollutant: No
Canadian TDG: Flammable liquids, n.o.s. (Toluene, Ethyl acetate)

SECTION 15. REGULATORY INFORMATION

United States Federal Regulations

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA Section 355: Substance not listed.

SARA Section 313: toluene (108-88-3) is listed. Propan-2-ol (67-63-0) is listed.

RCRA: Ethyl Acetate (141-78-6): U112; Toluene (108-88-3): U220

TSCA: All components are listed on the TSCA public inventory.

CERCLA: Ethyl Acetate (141-78-6): RQ = 5000 lbs (2270 kg); Toluene (108-88-3): RQ = 1000 lbs (454 kg)

State Regulations

California Proposition 65:

toluene (108-88-3): Chemicals known to cause reproductive toxicity for females.

toluene (108-88-3), ethanol (64-17-5): Chemicals known to cause developmental toxicity.

International Regulations

Canada WHMIS: ND

Europe EINECS Numbers: Gold (7440-57-5): EINECS#: 231-165-9; Toluene (108-88-3): EINECS#: 203-625-9; Ethanol (64-17-5): EINECS#: 200-578-6; Ethyl acetate (141-78-6): EINECS#: 205-500-4.

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.