

SAFETY DATA SHEET

Date Printed: 05/19/2024 Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: Copper(II) Neodecanoate

Product Code: CU2-NDEC-01-LIQ

CAS Number: 50315-14-5

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

Classification of the substance or mixture GHS02 Flame Flam. Liq. 2 H225 Highly flammable liquid and vapor. GHS08 Health hazard 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. Asp. Tox. 1 H304 May be fatal if swallowed and enters airways. GHS07 Skin Irrit. 2 H315 Causes skin irritation. STOT SE 3 H336 May cause drowsiness or dizziness. GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).



Hazard pictograms GHS02d GHS07d GHS08 Signal word Danger Hazard-determining components of labeling: toluene

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Hazard statements
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H361 Suspected of damaging fertility or the unborn child.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H304 May be fatal if swallowed and enters airways.
Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses,
if present
and easy to do. Continue rinsing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international
regulations.
Classification system:
NFPA ratings (scale 0 - 4)
2
3
0
Health = 2
Fire = 3
Reactivity = 0
HMIS-ratings (scale 0 - 4)
HEALTH
FIRE
REACTIVITY
*2
3
0
Health = *2
Fire = 3
Reactivity = 0
Other hazards
Results of PBT and vPvB assessment
PBT: N/A
vPvB: N/A
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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures Description: Mixture of the substances listed below with nonhazardous additions. Dangerous components: 108-88-3 toluene

SECTION 4. FIRST AID MEASURES

Description of first aid measures General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours

after the accident.

If inhaled: In case of unconsciousness place patient stably in side position for transportation. In case of skin contact: Immediately wash with soap and water; rinse thoroughly.

In case of eye contact: Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed: If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed:

No data available

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture No data available

Advice for firefighters

Protective equipment: No special measures required.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep unprotected persons away.

Environmental precautions:

Do not allow product to enter drains, sewage systems, or other water courses.

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water courses, or sewage systems.

Methods and materials for containment and cleanup:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Handling:

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols. Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
Conditions for safe storage, including any incompatibilities:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Specific end use(s) No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7. **Control parameters** Components with limit values that require monitoring at the workplace: 108-88-3 toluene PEL Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift REL Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm TLV Long-term value: 75 mg/m³, 20 ppm BEI 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 ma/a creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background) Additional information: The lists that were valid during the creation were used as basis. Exposure controls Personal protective equipment: General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the skin. Avoid contact with the eyes and skin. Breathing equipment: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands: SProtective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Eye protection: RTightly sealed goggles

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties Appearance: Form: Liquid Color: Dark green Odor: Unpleasant Odor threshold: Not determined. pH: Not determined. Melting point/Melting range: Undetermined. Boiling point/Boiling range: 110 °C (230 °F) Flash point: 4 °C (39 °F) (solvent) Flammability (solid, gas): N/A Ignition temperature: 535 °C (995 °F) Decomposition temperature: Not determined. Autoignition: Product is not selfigniting. Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible. **Explosion limits:** Lower: 1.2 Vol % Upper: 7.0 Vol % Vapor pressure at 20 °C (68 °F): 29 hPa (22 mm Hg) Density: Not determined. Relative density Not determined. Vapor density Not determined. Evaporation rate Not determined. Solubility in / Miscibility with Water: Not miscible or difficult to mix. Partition coefficient (n-octanol/water): Not determined. Viscosity:

Dynamic: Not determined. Kinematic: Not determined. Solvent content: Organic solvents: 40.0 % VOC content: 40.0 % 400.0 g/l / 3.34 lb/gl Other information No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity No data available Chemical stability Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Possibility of hazardous reactions No dangerous reactions known. Conditions to avoid No data available Incompatible materials: No data available Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: LD/LC50 values that are relevant for classification: 108-88-3 toluene Oral LD50 5000 mg/kg (rat) Dermal LD50 12124 mg/kg (rabbit) Inhalative LC50/4 h 5320 mg/l (mouse) Primary irritant effect: on the skin: Irritant to skin and mucous membranes. on the eye: No irritating effect. Sensitization: No sensitizing effects known. Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations: Irritant Carcinogenic categories IARC (International Agency for Research on Cancer) 108-88-3 toluene 3 NTP (National Toxicology Program) None of the ingredients is listed. OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity Aquatic toxicity: No data available Persistence and degradability No data available Behavior in environmental systems: Bioaccumulative potential No data available Mobility in soil No data available Additional ecological information: Not known to be hazardous to water. Results of PBT and vPvB assessment PBT: N/A vPvB: N/A Other adverse effects No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods Recommendation: Must not be disposed of together with household garbage. Do not allow product to enter drains, sewage systems, or other water courses system. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

UN-Number DOT, IMDG, IATA UN1993 UN proper shipping name DOT Flammable liquids, n.o.s. IMDG FLAMMABLE LIQUID, N.O.S. IATA Flammable liquid, n.o.s. Transport hazard class(es) DOT **Class 3 Flammable liquids** Label 3 IMDG, IATA **Class 3 Flammable liquids** Label 3 Packing group DOT, IMDG, IATA III Environmental hazards: Marine pollutant: No Special precautions for user Warning: Flammable liquids EMS Number: F-E,S-E Stowage Category A Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N/A Transport/Additional information: DOT Quantity limitations On passenger aircraft/rail: 60L On cargo aircraft only: 220L IMDG Limited quantities (LQ) 5L Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml UN "Model Regulation": UN 1993 FLAMMABLE LIQUIDS, N.O.S., 3, III

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara Section 355 (extremely hazardous substances): None of the ingredients is listed. Section 313 (Specific toxic chemical listings): All ingredients are listed. TSCA (Toxic Substances Control Act): All ingredients are listed. **Proposition 65** Chemicals known to cause cancer: None of the ingredients is listed. Chemicals known to cause reproductive toxicity for females: All ingredients are listed. Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. Chemicals known to cause developmental toxicity: All ingredients are listed. Carcinogenic categories EPA (Environmental Protection Agency) 108-88-3 toluene II TLV (Threshold Limit Value established by ACGIH) 108-88-3 toluene A4 NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients is listed. GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms d~?GHS02d~?GHS07d~?GHS08 Signal word Danger Hazard-determining components of labeling: toluene Hazard statements H225 Highly flammable liquid and vapor. H315 Causes skin irritation. H361 Suspected of damaging fertility or the unborn child. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure. H304 May be fatal if swallowed and enters airways. Precautionary statements P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment 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.