## SECTION 1: Identification

### 1.1. Identification

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>COPPER(II) 2,2,6,6-TETRAMETHYL-3,5-HEPTANEDIONATE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product code</strong></td>
<td>AKC262</td>
</tr>
<tr>
<td><strong>Product form</strong></td>
<td>Substance</td>
</tr>
<tr>
<td><strong>Physical state</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Formula</strong></td>
<td>C22H38CuO4</td>
</tr>
<tr>
<td><strong>Synonyms</strong></td>
<td>COPPER TMHD; CUPRIC DIPIVALOYLMETHANE</td>
</tr>
<tr>
<td><strong>Chemical family</strong></td>
<td>METAL COMPOUND</td>
</tr>
</tbody>
</table>

### 1.2. Recommended use and restrictions on use

**Recommended use**: Chemical intermediate

### 1.3. Supplier

**GELEST, INC.**  
11 East Steel Road  
Morrisville, PA 19067  
USA  
T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST  
info@gelest.com - www.gelest.com

### 1.4. Emergency telephone number

**Emergency number**: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the substance or mixture

**GHS-US classification**

- Serious eye damage/eye irritation Category 2A  
  H319  Causes serious eye irritation

**Full text of H statements**: see section 16

### 2.2. GHS Label elements, including precautionary statements

**GHS US labeling**

**Hazard pictograms (GHS US)**

- ![](image)

**Signal word (GHS US)**: Warning

**Hazard statements (GHS US)**: H319 - Causes serious eye irritation

**Precautionary statements (GHS US)**:  
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
- P264 - Wash hands thoroughly after handling.  
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
- P337+P313 - If eye irritation persists: Get medical advice/attention.

### 2.3. Hazards not otherwise classified (HNOC)

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

**Substance type**: Mono-constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper(II) 2,2,6,6-tetramethyl-3,5-heptanedionate</td>
<td>14040-05-2</td>
<td>(CAS-No.) 14040-05-2</td>
<td>95 - 100</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

**Full text of hazard classes and H-statements**: see section 16

### 3.2. Mixtures

Not applicable
## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

**First-aid measures general**
- Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

**First-aid measures after inhalation**
- Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

**First-aid measures after skin contact**
- Wash with plenty of soap and water. Get medical advice/attention.

**First-aid measures after eye contact**
- Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

**First-aid measures after ingestion**
- Never give anything by mouth to an unconscious person. Get medical advice/attention.

### 4.2. Most important symptoms and effects (acute and delayed)

**Symptoms/effects after inhalation**
- May cause irritation to the respiratory tract.

**Symptoms/effects after skin contact**
- May cause skin irritation.

**Symptoms/effects after eye contact**
- Causes serious eye irritation.

**Symptoms/effects after ingestion**
- No information available.

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media**

**Unsuitable extinguishing media**
- None known.

### 5.2. Specific hazards arising from the chemical

**Fire hazard**
- Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

### 5.3. Special protective equipment and precautions for fire-fighters

**Firefighting instructions**
- Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.

**Protection during firefighting**
- Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

**Protective equipment**
- Wear protective equipment as described in Section 8.

**Emergency procedures**
- Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

**Protective equipment**
- Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: “Exposure controls/personal protection”.

### 6.2. 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

- **For containment**
  - Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

- **Methods for cleaning up**
  - Sweep or shovel spills into appropriate container for disposal.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- **Precautions for safe handling**
  - Avoid contact with skin and eyes. Do not breathe dust. Avoid dust formation. Provide local exhaust or general room ventilation to minimize exposure to dust.

- **Hygiene measures**
  - Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

- **Storage conditions**
  - Keep container tightly closed.

- **Incompatible materials**
  - Oxidizing agent.

- **Storage area**
  - Store in a well-ventilated place. Store away from heat.
COPPER(II) 2,2,6,6-TETRAMETHYL-3,5-HEPTANEDIONATE
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Copper(II) 2,2,6,6-tetramethyl-3,5-heptanedionato (14040-05-2)</th>
<th>ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>1 mg/m³ as Cu</th>
</tr>
</thead>
</table>

8.2. Appropriate engineering controls

Appropriate engineering controls: Provide local exhaust or general room ventilation.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:

Neoprene or nitrile rubber gloves

Eye protection:

Chemical goggles. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (teal cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state: Solid
- Appearance: Crystalline solid.
- Molecular mass: 430.09 g/mol
- Color: Purple.
- Odor: No data available
- Odor threshold: No data available
- Refractive index: No data available
- pH: No data available
- Relative evaporation rate (butyl acetate=1): No data available
- Melting point: 198 °C
- Freezing point: No data available
- Boiling point: 100 °C @ 0.1 mm Hg sub
- Flash point: No data available
- Auto-ignition temperature: No data available
- Decomposition temperature: > 315 °C
- Flammability (solid, gas): No data available
- Vapor pressure: < 0.01 mm Hg @ 25°C
- Relative vapor density at 20 °C: No data available
- Relative density: No data available
- % Volatiles: < 3 %
- Solubility: Insoluble in water.
  Organic solvent: Soluble: THF
- Log Pow: No data available
- Log Kow: No data available
- Viscosity, kinematic: No data available
- Viscosity, dynamic: No data available
- Explosive properties: No data available
- Oxidizing properties: No data available
- Explosion limits: No data available
### COPPER(II) 2,2,6,6-TETRAMETHYL-3,5-HEPTANEDIONATE

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9.2. **Other information**
- No additional information available

### SECTION 10: Stability and reactivity

10.1. **Reactivity**
- No additional information available

10.2. **Chemical stability**
- Stable.

10.3. **Possibility of hazardous reactions**
- No additional information available

10.4. **Conditions to avoid**

10.5. **Incompatible materials**
- Oxidizing agent.

10.6. **Hazardous decomposition products**
- Copper oxide fumes. Organic acid vapors.

### SECTION 11: Toxicological information

11.1. **Information on toxicological effects**
- **Acute toxicity**: Not classified
- **Skin corrosion/irritation**: Not classified
- **Serious eye damage/irritation**: Causes serious eye irritation.
- **Respiratory or skin sensitization**: Not classified
- **Germ cell mutagenicity**: Not classified
- **Carcinogenicity**: Not classified
- **Reproductive toxicity**: Not classified
- **Specific target organ toxicity – single exposure**: Not classified
- **Specific target organ toxicity – repeated exposure**: Not classified
- **Aspiration hazard**: Not classified
- **Symptoms/effects after inhalation**: May cause irritation to the respiratory tract.
- **Symptoms/effects after skin contact**: May cause skin irritation.
- **Symptoms/effects after eye contact**: Causes serious eye irritation.
- **Symptoms/effects after ingestion**: No information available.
- **Reason for classification**: Expert Judgment

### SECTION 12: Ecological information

12.1. **Toxicity**
- No additional information available

12.2. **Persistence and degradability**
- No additional information available

12.3. **Bioaccumulative potential**
- No additional information available

12.4. **Mobility in soil**
- No additional information available

12.5. **Other adverse effects**
- **Effect on the ozone layer**: No additional information available

### SECTION 13: Disposal considerations

13.1. **Disposal methods**
- **Sewage disposal recommendations**: Do not dispose of waste into sewer.
- **Product/Packaging disposal recommendations**: Dispose in a safe manner in accordance with local/national regulations. Dispose of solid materials or residues at a licensed site.
- **Ecology - waste materials**: Avoid release to the environment.
COPPER(II) 2,2,6,6-TETRAMETHYL-3,5-HEPTANEDIONATE

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SECTION 14: Transport information

14.1. UN number
Not regulated for transport.

14.2. UN proper shipping name
Not applicable

14.3. Additional information
Other information : No supplementary information available.

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>COPPER(II) 2,2,6,6-TETRAMETHYL-3,5-HEPTANEDIONATE (14040-05-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA Exemption/Exclusion</td>
</tr>
</tbody>
</table>

Copper(II) 2,2,6,6-tetramethyl-3,5-heptanedionate (14040-05-2)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

<table>
<thead>
<tr>
<th>CANADA</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EU-Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
</tr>
</tbody>
</table>

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H319</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

Abbreviations and acronyms: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

Hazard Rating

Health: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)

Physical: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
COPPER(II) 2,2,6,6-TETRAMETHYL-3,5-HEPTANEDIONATE
Safety Data Sheet

Prepared by safety and environmental affairs.
Date of issue: 01/04/2016 Version: 1.0

SDS US (GHS HazCom 2012) - Custom
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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