

SAFETY DATA SHEET

Revision Date 14-Feb-2020 Revision Number 2

1. Identification

Product Name Copper(II) 2,4-pentanedionate

Cat No. : A14920

CAS-No 13395-16-9

Synonyms 2,4-Pentanedione, metal derivative; Cupric acetylacetonate

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity
Category 4
Acute dermal toxicity
Category 4
Acute Inhalation Toxicity - Dusts and Mists
Category 4
Skin Corrosion/Irritation
Category 2
Serious Eye Damage/Eye Irritation
Category 2
Reproductive Toxicity
Category 1B
Specific target organ toxicity (single exposure)
Category 3

Target Organs - Respiratory system.

Combustible dust Yes

Label Elements

Signal Word

Danger

Hazard Statements

May form combustible dust concentrations in air Causes skin irritation Causes serious eye irritation May cause respiratory irritation May damage fertility or the unborn child Harmful if swallowed, in contact with skin or if inhaled



Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear eye/face protection

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|--|------------|----------|
| Copper, bis(2,4-pentanedionato-O,O')-, (SP-4-1)- | 13395-16-9 | 98 |

4. First-aid measures

Eve Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention.

Inhalation Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen.

If not breathing, give artificial respiration. Get medical attention.

Ingestion Clean mouth with water. Get medical attention.

Most important symptoms and

effects

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

No information available.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature 250 °C / 482 °F

Explosion Limits

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Fine dust dispersed in air may ignite.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2). Copper oxides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

HealthFlammabilityInstabilityPhysical hazards210N/A

6. Accidental release measures

Personal Precautions
Environmental Precautions

Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional Ecological Information. Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Avoid dust formation. Sweep up and shovel into suitable containers for disposal. Do not let **Up** this chemical enter the environment.

Handling Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then

seek immediate medical assistance.

Storage Keep in a dry, cool and well-ventilated place. Refer product specification and/or product

label for specific storage temperature requirement. Keep container tightly closed.

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|-----------------------------|--------------------------|----------|-----------------------------|------------------|
| Copper, | TWA: 1 mg/m ³ | | IDLH: 100 mg/m ³ | |
| bis(2,4-pentanedionato-O,O' | _ | | TWA: 1 mg/m ³ | |
|)-, (SP-4-1)- | | | _ | |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Powder Solid Appearance Blue

Odor Slight

Odor Threshold
pHNo information available
No information available

Melting Point/Range 245 °C / 473 °F

Boiling Point/Range 160 °C / 320 °F @ 9.8 mmHg

Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor Pressure0.13 hPa @ 163 °CVapor DensityNot applicable

Specific GravityNo information availableSolubilityNo information available

Partition coefficient; n-octanol/water

No data available

Autoignition Temperature

No data available

250 °C / 482 °F

Decomposition Temperature 245 °C
Viscosity 245 °C
Not applicable

Molecular Formula C10 H14 Cu O4

Molecular Weight 261.76

10. Stability and reactivity

Copper(II) 2,4-pentanedionate

Reactive HazardNone known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Avoid dust formation. Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Copper oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information

Toxicologically Synergistic

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|------------------------|------------|------------|------------|------------|------------|------------|
| Copper, | 13395-16-9 | Not listed |
| bis(2,4-pentanedionato | | | | | | |
| -O,O')-, (SP-4-1)- | | | | | | |

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for

complete information.

12. Ecological information

Ecotoxicity

Do not empty into drains. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability Insoluble in water May persist based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Is not likely mobile in the environment due its low water solubility.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

15. Regulatory information

United States of America Inventory

| | Component | CAS-No | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|--|--------------------------------|------------|------|--|-----------------------------|
| | Copper, | 13395-16-9 | X | ACTIVE | - |
| | bis(2,4-pentanedionato-O,O')-, | | | | |
| | (SP-4-1)- | | | | |

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| CAS-No | DSL | NDSL | EINECS | PICCS | ENCS | AICS | IECSC | KECL |
|------------|-----|------|-----------|-------|------|------|-------|----------|
| 13395-16-9 | X | - | 236-477-9 | X | X | X | Х | KE-08946 |
| | | | | | | | | |
| | | | | | | | | |

U.S. Federal Regulations

SARA 313

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|--|------------|----------|----------------------------------|
| Copper, bis(2,4-pentanedionato-O,O')-, (SP-4-1)- | 13395-16-9 | 98 | 1.0 |

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|--|-------------------------------|--------------------------------|------------------------|---------------------------|
| Copper, bis(2,4-pentanedionato-O,O')-, (SP-4-1)- | - | - | Х | - |

Clean Air Act Not applicable

Copper(II) 2,4-pentanedionate

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|--------------------------|---------------|------------|--------------|----------|--------------|
| Copper, | - | X | X | - | - |
| bis(2,4-pentanedionato-O | | | | | |
| ,O')-, (SP-4-1)- | | | | | |

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By Health, Safety and Environmental Department

Email: tech@alfa.com

www.alfa.com

Revision Date 14-Feb-2020 **Print Date** 14-Feb-2020

Revision Summary SDS authoring systems update, replaces ChemGes SDS No. 13395-16-9/3.

Disclaimer

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End of SDS