

|   |   |                              |
|---|---|------------------------------|
| <a href="#">Bis(acetonitrile)tetracarbonylmolybdenum(0)</a> |   | <a href="#">Pricing &gt;</a> |
| Linear Formula  | C <sub>8</sub> H <sub>6</sub> MoN <sub>2</sub> O <sub>4</sub> |                              |
| Pubchem CID   | 11130016  |                              |
| MDL Number  | N/A   |                              |
| EC No.  | N/A   |                              |
| IUPAC Name  | acetonitrile; carbon monoxide; molybdenum                     |                              |
| SMILES  | CC#N.CC#N.[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[Mo]        |                              |
| Inchl Identifier  | InChI=1S/2C2H3N.4CO.Mo/c2*1-2-3;4*1-2;/h2*1H3;;;;;            |                              |
| Inchl Key   | KQSCDDXBSXPYLD-UHFFFAOYSA-N                                   |                              |
| Signal Word   | N/A   |                              |
| Hazard Statements   | N/A   |                              |
| Hazard Codes  | N/A   |                              |
| Risk Codes  | N/A   |                              |
| Safety Statements   | N/A   |                              |
| Transport Information                                       | N/A   |                              |

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## SAFETY DATA SHEET

Date Accessed: 04/24/2024

Date Revised: 01/15/2022

### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #14126-87-5

**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:

## **SECTION 2. HAZARDS IDENTIFICATION**

### **2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

The substance is not classified according to the CLP regulation.

### **2.2 Label elements**

Labelling according to Regulation (EC) No 1272/2008

Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Precautionary statements

P231 Handle under inert gas.

P262 Do not get in eyes, on skin, or on clothing.

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.

P422 Store contents under inert gas.

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

### **2.3 Other hazards**

Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

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## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

### **3.1 Chemical characterisation: Substances**

CAS # / Substance Name

14126-87-5

Bis(acetonitrile)tetracarbonylmolybdenum(0), 98%

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## **SECTION 4. FIRST AID MEASURES**

### **4.1 Description of first aid measures**

General information: No special measures required.

If inhaled: Supply fresh air; consult doctor in case of complaints.

In case of skin contact: Generally the product does not irritate the skin.

In case of eye contact: Rinse opened eye for several

minutes under running water. Consult a physician.  
If swallowed: If symptoms persist consult doctor.  
4.2 Most important symptoms and effects, both acute and delayed:  
No data available  
4.3 Indication of any immediate medical attention and special treatment needed  
No data available

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## **SECTION 5. FIREFIGHTING MEASURES**

5.1 Extinguishing media  
Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
5.2 Special hazards arising from the substance or mixture No data available  
5.3 Advice for firefighters  
Protective equipment: No special measures required.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment and emergency procedures Not required.  
6.2 Environmental precautions: Do not allow to enter sewers/ surface or groundwater.  
6.3 Methods and materials for containment and cleanup:  
Dispose contaminated material as waste according to item 13.  
6.4 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.

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## **SECTION 7. HANDLING AND STORAGE**

7.1 Precautions for safe handling  
No special measures required.  
Open and handle receptacle with care.  
Information about fire - and explosion protection: No special measures required.  
7.2 Conditions for safe storage, including any incompatibilities:  
Requirements to be met by storerooms and receptacles: No special requirements.  
Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.  
7.3 Specific end use(s) No data available

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Additional information about design of technical facilities: No further data; see item 7.

### **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional information: The lists valid during the making were used as basis.

### **8.2 Exposure controls**

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Protection of hands:

Protective 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.

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: Safety glasses

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical properties

Appearance:

Form: Solid

Colour: Yellow

Odor: Characteristic  
Odor threshold: No data available.  
pH: N/A  
Melting point/Melting range: Undetermined.  
Boiling point/Boiling range: Undetermined.  
Flash point: N/A  
Flammability (solid, gas): Product is not flammable.  
Ignition temperature:  
Decomposition temperature: No data available.  
Self-igniting: No data available.  
Danger of explosion: Product does not present an explosion hazard.  
Explosion limits:  
Lower: No data available.  
Upper: No data available.  
Vapor pressure: N/A  
Density: No data available.  
Relative density: No data available.  
Vapor density: N/A  
Evaporation rate: N/A  
Solubility in / Miscibility with water: Insoluble.  
Partition coefficient (n-octanol/water): No data available.  
Viscosity:  
Dynamic: N/A  
Kinematic: N/A  
Solvent content:  
Organic solvents: 0.0 %  
VOC (EC): 0.00 %  
Solids content: 100.0 %  
9.2 Other information: No data available

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## **SECTION 10. STABILITY AND REACTIVITY**

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

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

11.1 Information on toxicological effects  
Acute toxicity: Based on available data, the

classification criteria are not met.

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

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## **SECTION 12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Aquatic toxicity: No data available

12.2 Persistence and degradability No data available

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil No data available

Additional ecological information:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach groundwater, water courses, or sewage systems.

12.5 Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

12.6 Other adverse effects No data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

Recommendation Disposal must be made according to official regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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## **SECTION 14. TRANSPORT INFORMATION**

14.1 UN-Number  
ADR, ADN, IMDG, IATA not regulated  
14.2 UN proper shipping name  
ADR, ADN, IMDG, IATA not regulated  
14.3 Transport hazard class(es)  
ADR, ADN, IMDG, IATA  
Class not regulated  
14.4 Packing group  
ADR, IMDG, IATA not regulated  
14.5 Environmental hazards: N/A  
14.6 Special precautions for user N/A  
14.7 Transport in bulk according to Annex II of  
Marpol and the IBC Code N/A  
UN "Model Regulation": not regulated

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## **SECTION 15. REGULATORY INFORMATION**

15.1 Safety, health and environmental  
regulations/legislation specific for the substance or  
mixture  
Directive 2012/18/EU  
Named dangerous substances - ANNEX I Substance  
is not listed.  
National regulations:  
Waterhazard class: Water hazard class 1 (Self-  
assessment): slightly hazardous for water.  
15.2 Chemical safety assessment: A Chemical Safety  
Assessment has not been carried out.

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## **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.  
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