

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Molybdenum 2-Ethylhexanoate

Product Code: MO-2EH-05-LIQ

CAS Number: 34041-09-3

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
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Los Angeles, CA 90024
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SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS08 Health hazard

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

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS08

Signal word

Warning

Hazard-determining components of labeling:

2-ethylhexanoic acid

Hazard statements

H361 Suspected of damaging fertility or the unborn child.

Precautionary statements

P262

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

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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)

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = *0

Fire = 0

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures

Description:

Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

149-57-5 2-ethylhexanoic acid

SECTION 4. FIRST AID MEASURES

Description of first aid measures

If inhaled:

Supply fresh air; consult doctor in case of complaints.

In case of skin contact:

Immediately rinse with water.

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.

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

Not required.

Environmental precautions:

No special measures required.

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.

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

No special precautions are necessary if used correctly.

Information about protection against explosions and fires:

No special measures required.

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.

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:

149-57-5 2-ethylhexanoic acid

TLV Long-term value: 5* mg/m³

*as inhalable fraction and vapor

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.

Wash hands before breaks and at the end of work.

Breathing equipment:

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. 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:

Goggles recommended during refilling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Liquid

Color: Red-brown

Odor: Odorless

Odor threshold: No data available.

pH: No data available.

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

Flash point: N/A

Flammability (solid, gas):

No data available.

Ignition temperature: 310 °C (590 °F)

Decomposition temperature: No data available.

Autoignition: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: No data available.

Upper: No data available.

Vapor pressure: No data available.

Density: No data available.
Relative density
No data available.
Vapor density
No data available.
Evaporation rate
No data available.
Solubility in Water (H₂O): Not miscible or difficult to mix.
Partition coefficient (n-octanol/water): No data available.
Viscosity:
Dynamic: No data available.
Kinematic: 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:
149-57-5 2-ethylhexanoic acid
Oral
LD50 3000 mg/kg (rat)
Dermal LD50 1260 mg/kg (rabbit)
Primary irritant effect:
on the skin:
No irritant effect.
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:
Carcinogenic categories
IARC (International Agency for Research on Cancer)
None of the ingredients is listed.

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, ADN, IMDG, IATA
not regulated
UN proper shipping name
DOT, ADN, IMDG, IATA
not regulated
Transport hazard class(es)
DOT, ADN, IMDG, IATA
Class
not regulated
Packing group

DOT, IMDG, IATA
not regulated
Environmental hazards:
Marine pollutant:
No
Special precautions for user
N/A
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
N/A:
UN "Model Regulation":
not regulated

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):

None of the ingredients is 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:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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).

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

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