

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Name: Colloidal Graphite

Product Number: All applicable American Elements product codes, e.g. COLL-GR-01-LIQ

CAS #:

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
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Emergency telephone number:

+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Irritant

Irritating to eyes.

Highly flammable

Highly flammable.

Vapors may cause drowsiness and dizziness.

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of international guidelines.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements



Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

Code letter and hazard designation of product:

Irritant

Highly flammable

Risk phrases:

Highly flammable.

Irritating to eyes.

Vapors may cause drowsiness and dizziness.

Safety phrases:

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

Keep away from sources of ignition - No smoking.

Do not breathe gas/fumes/Vapor/spray (appropriate wording to be specified by the manufacturer).

This material and its container must be disposed of as hazardous waste.

Classification system:

NFPA ratings (scale 0 - 4)

Health = 1

Fire = 3

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1

Fire = 3

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:

67-63-0 propan-2-ol

50-100%

7782-42-5 Graphite

10-25%

71-36-3 n-Butyl Alcohol

2.5-10%

107-41-5 2-methylpentane-2,4-diol

2.5-10%

107-98-2 1-methoxy-2-propanol

2.5-10%

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:

Generally the product does not irritate the skin.

In case of eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
If swallowed:
If symptoms persist consult 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, sand, extinguishing powder. Do not use water.
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:
Prevent seepage into sewage system, workpits and cellars.
Methods and materials for containment and cleanup:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
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

Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
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:

67-63-0 propan-2-ol

PEL Long-term value: 980 mg/m³, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm

Long-term value: 980 mg/m³, 400 ppm

TLV Short-term value: 984 mg/m³, 400 ppm

Long-term value: 492 mg/m³, 200 ppm

BEI

71-36-3 n-Butyl Alcohol

PEL Long-term value: 300 mg/m³, 100 ppm

REL Ceiling limit value: 150 mg/m³, 50 ppm

Skin

TLV Long-term value: 61 mg/m³, 20 ppm

107-41-5 2-methylpentane-2,4-diol

REL Ceiling limit value: 125 mg/m³, 25 ppm

TLV Ceiling limit value: 121 mg/m³, 25 ppm

107-98-2 1-methoxy-2-propanol

REL Short-term value: 540 mg/m³, 150 ppm

Long-term value: 360 mg/m³, 100 ppm

TLV Short-term value: 369 mg/m³, 100 ppm

Long-term value: 184 mg/m³, 50 ppm

Ingredients with biological limit values:

67-63-0 propan-2-ol

BEI 40 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Acetone (background, nonspecific)

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.

Avoid contact with the eyes.

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:

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:

Tightly sealed goggles

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Liquid

Color: Black

Odor: Alcohol-like

Odor threshold: No data available.

pH: No data available.

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

Flash point: 13 °C (55 °F)

Flammability (solid, gas): Not flammable.

Ignition temperature: 425 °C (797 °F)

Decomposition temperature: No data available.

Autoignition: Product is not selfigniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

Explosion limits:

Lower: 2.0 Vol %

Upper: 12.0 Vol %

Vapor pressure at 20 °C (68 °F): 43 hPa (32 mm Hg)

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.

Solvent content:

Organic solvents: 76.8 %

VOC content: 76.8 %

767.9 g/l / 6.41 lb/g

Other information

No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

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:

67-63-0 propan-2-ol

Oral LD50 5045 mg/kg (rat)

Dermal LD50 12800 mg/kg (rabbit)

Inhalative LC50/4 h 30 mg/l (rat)

Primary irritant effect:

on the skin:

No irritant effect.

on the eye:

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)

67-63-0 propan-2-ol

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
Bioaccumulative potential
No data available
Mobility in soil
No data available
Additional ecological information:
General notes:
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, ADR, IMDG, IATA
UN1993
UN proper shipping name
DOT
Flammable liquids, n.o.s. (Isopropanol (Isopropyl alcohol))
ADR
1993 Flammable liquids, n.o.s. (Isopropanol (Isopropyl alcohol))
IMDG, IATA
FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))
Transport hazard class(es)

DOT
Class
3 Flammable liquids
Label
3
ADR, IMDG, IATA
Class
3 Flammable liquids
Label
3
Packing group
DOT, ADR, IMDG, IATA
II
Environmental hazards:
Marine pollutant:
No
Special precautions for user
Warning: Flammable liquids
Danger code (Kemler):
33
EMS Number: F-E,S-E
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: 5 L
On cargo aircraft only: 60 L
ADR
Excepted quantities (EQ)
Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
IMDG
Limited quantities (LQ)
1L
Excepted quantities (EQ)
Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

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):
67-63-0 propan-2-ol
71-36-3 n-Butyl Alcohol
TSCA (Toxic Substances Control Act):
67-63-0 propan-2-ol

7782-42-5 Graphite

71-36-3 n-Butyl Alcohol

107-41-5 2-methylpentane-2,4-diol

107-98-2 1-methoxy-2-propanol

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)

71-36-3 n-Butyl Alcohol

TLV (Threshold Limit Value established by ACGIH)

67-63-0 propan-2-ol

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

SECTION 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.