

# SAFETY DATA SHEET

Date Printed: 04/19/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifier:** Potassium Graphite

**Product Code:** K-GR-02

**CAS Number:** 12081-88-8

**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:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

· Classification of the substance or mixture

GHS02 Flame

Water-react. 1 H260 In contact with water releases flammable gases which may ignite spontaneously.

GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

· Label elements

· GHS label elements

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

· Hazard pictograms



GHS02 GHS05

· Signal word Danger

· Hazard-determining components of labeling:

Potassium graphite KC8

· Hazard statements

H260 In contact with water releases flammable gases which may ignite spontaneously.

H314 Causes severe skin burns and eye damage.

- Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P231+P232 Handle under inert gas. Protect from moisture.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin

with water/shower.

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.

- Classification system:

- NFPA ratings (scale 0 - 4)

3

0

2

W—

Health = 3

Fire = 0

Reactivity = 2

The substance demonstrates unusual reactivity with water.

- HMIS-ratings (scale 0 - 4)

HEALTH

FIRE

REACTIVITY

3

0

2

Health = 3

Fire = 0

Reactivity = 2

- Other hazards

- Results of PBT and vPvB assessment

- PBT: N/A

- vPvB: N/A

---

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

- Substances

- CAS # / Substance Name

12081-88-8 Potassium graphite KC8

---

## SECTION 4. FIRST AID MEASURES

Description of first aid measures

- General information: Immediately remove any clothing soiled by the product.

- If inhaled: In case of unconsciousness place patient stably in side position for transportation.

- In case of skin contact: Immediately wash with soap and water; rinse thoroughly.
- In case of eye contact: Rinse opened eye for several minutes under running water. Consult a physician.
- If swallowed: Drink copious amounts of water and provide fresh air. Immediately call a 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: CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
  - For safety reasons unsuitable extinguishing agents: Water
- 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: No special measures required.
  - Methods and materials for containment and cleanup:  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
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 Thorough dedusting.
  - Handling: Handle under inert gas.
  - Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
  - Conditions for safe storage, including any incompatibilities
  - Storage: Store contents under inert gas.
  - 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:  
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: Not required.
- 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 and skin.

##### · 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.

##### · 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

#### · General Information

##### · Appearance:

Form: Solid

Color: Bronze colored

##### · Odor: Odorless

· Odor threshold: No data available.

##### · pH: N/A

· Melting point/Melting range: no data °C

Boiling point/Boiling range: Undetermined.

##### · Flash point: N/A

· Flammability (solid, gas): Contact with water liberates extremely flammable gases.

##### · Ignition temperature:

Decomposition temperature: No data available.

· Autoignition: No data available.

· Danger of explosion: No data available.

· 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

Organic solvents: 0.0 %

- 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 Contact with water releases flammable gases.
  - 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:
- Primary irritant effect:
- on the skin: Caustic effect on skin and mucous membranes.
- on the eye: Strong caustic effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- Carcinogenic categories
- IARC (International Agency for Research on Cancer)

Substance is not listed.

- NTP (National Toxicology Program)

Substance is not listed.

- OSHA-Ca (Occupational Safety & Health Administration)

Substance is not 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: Must not reach bodies of water or drainage ditch undiluted or unneutralized.
  - 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, IMDG, IATA UN2257
- UN proper shipping name
- DOT Potassium
- IMDG, IATA POTASSIUM
- Transport hazard class(es)
- DOT
- Class 4.3 Substances which, in contact with water, emit flammable gases
- Label 4.3
- IMDG, IATA
- Class 4.3 Substances which, in contact with water, emit flammable gases
- Label 4.3
- Packing group
- DOT, IMDG, IATA I
- Environmental hazards:
- Marine pollutant: No
- Special precautions for user N/A
- Danger code (Kemler): X423
- EMS Number: F-G,S-N
- 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: Forbidden  
On cargo aircraft only: 15 kg
- IMDG
- Limited quantities (LQ) 0
- Excepted quantities (EQ) Code: E0  
Not permitted as Excepted Quantity

- UN "Model Regulation": UN2257, Potassium, 4.3, I
- 

## SECTION 15. REGULATORY INFORMATION

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- Section 355 (extremely hazardous substances):  
Substance is not listed.
- Section 313 (Specific toxic chemical listings):  
Substance is not listed.
- TSCA (Toxic Substances Control Act):  
Substance is not listed.
- Proposition 65
- Chemicals known to cause cancer:  
Substance is not listed.
- Chemicals known to cause reproductive toxicity for females:  
Substance is not listed.
- Chemicals known to cause reproductive toxicity for males:  
Substance is not listed.
- Chemicals known to cause developmental toxicity:  
Substance is not listed.
- Carcinogenic categories
- EPA (Environmental Protection Agency)  
Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH)  
Substance is not listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health)  
Substance is not listed.
- GHS label elements  
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms  
GHS02 GHS05
- Signal word Danger
- Hazard-determining components of labeling:  
Potassium graphite KC8
- Hazard statements  
H260 In contact with water releases flammable gases which may ignite spontaneously.  
H314 Causes severe skin burns and eye damage.
- Precautionary statements  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P23+P232 Handle under inert gas. Protect from moisture.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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.
- 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 additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.