

# SAFETY DATA SHEET

Date Printed: 05/08/2024 Date Revised: 01/15/2022

### **SECTION 1. IDENTIFICATION**

**Product Identifier:** 98%+ Potassium Monoperoxysulfate

Product Code: K-OSAT-018

**CAS Number:** 70693-62-8

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

GHS03 Flame over circle

Ox. Sol. 3 H272 May intensify fire; oxidizer.

GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**GHS05 Corrosion** 

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

GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

GHS label elements

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



Hazard pictograms GHS03 GHS05 GHS07 GHS08 Signal word Danger Hazard statements H272 May intensify fire; oxidizer. H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

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.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 In case of inadequate ventilation wear respiratory protection.

P220 Keep/Store away from clothing/combustible materials.

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.

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

Classification system:

NFPA ratings (scale 0 - 4)

3

0 OX

Health = 4

Fire = 3

Reactivity = 0

The substance possesses oxidizing properties.

HMIS-ratings (scale 0 - 4)

**HEALTH** 

**FIRE** 

REACTIVITY

4

3 0

Health = 4

Fire = 3

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: N/A vPvB: N/A

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

Substances

CAS # / Substance Name

70693-62-8 Potassium monoperoxysulfate OXONE®

Identification number(s) EC number: 274-778-7

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

Description of first aid measures

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

If inhaled:

Supply fresh air and to be sure call for a doctor.

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: CO2, 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: Do not allow to enter sewers/ surface or groundwater.

Methods and materials for containment and cleanup:

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

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: Keep receptacle tightly sealed.

### 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:

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.

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: Solid Color: White Odor: Odorless

39.5.0

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): Contact with combustible material may cause fire.

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 v

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 % Solids content: 100.0 %

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 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:

Primary irritant effect:

on the skin: Strong caustic effect on skin and mucous membranes.

on the eye: Strong caustic effect.

Sensitization:

Sensitization possible through inhalation. Sensitization possible through skin contact.

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:

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

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

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 UN3087
UN proper shipping name
DOT Oxidizing solid, toxic, n.o.s.
IMDG, IATA OXIDIZING SOLID, TOXIC, N.O.S.
Transport hazard class(es)
DOT

Class 5.1 Oxidizing substances Label 5.1+6.1 IMDG, IATA

Class 5.1 Oxidizing substances Label 5.1+6.1 Packing group DOT, IMDG, IATA II Environmental hazards: Marine pollutant: No

Special precautions for user N/A

Danger code (Kemler): 80 EMS Number: F-A.S-Q

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 kg

On cargo aircraft only: 25 kg

**IMDG** 

Limited quantities (LQ) 1 kg

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g

UN "Model Regulation": UN3087, Oxidizing solid, toxic, n.o.s., 5.1 (6.1), II

### **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

GHS03 GHS05 GHS07 GHS08

Signal word Danger

Hazard statements

H272 May intensify fire; oxidizer.

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

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.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 In case of inadequate ventilation wear respiratory protection.

P220 Keep/Store away from clothing/combustible materials.

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.

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

National regulations:

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