Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.07.2021 *Revision: 16.07.2021*

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: Potassium hydrogen sulfide, anhydrous, min. 95%**

· **Item number:** 19-3300
· **CAS Number:**
1310-61-8
· **EC number:**
215-182-9
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Strem Chemicals, Inc.
7 Mulliken Way
NEWBURYPORT, MA 01950
USA
info@strem.com

· **Further information obtainable from:** Technical Department
· **1.4 Emergency telephone number:**
EMERGENCY: CHEMTREC: + 1 (800) 424-9300
During normal opening times: +1 (978) 499-1600

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Sol. 1 H228 Flammable solid.
Self-heat. 1 H251 Self-heating: may catch fire.

GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H332 Harmful if inhaled.
Skin Sens. 1 H317 May cause an allergic skin reaction.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.

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· ***Hazard pictograms***

GHS02 GHS07 GHS08

· ***Signal word*** *Danger*

· ***Hazard-determining components of labelling:***
potassium hydrogensulphide
· ***Hazard statements***

H228	*Flammable solid.*
H251	*Self-heating: may catch fire.*
H302+H332	*Harmful if swallowed or if inhaled.*
H317	*May cause an allergic skin reaction.*
H351	*Suspected of causing cancer.*
H373	*May cause damage to organs through prolonged or repeated exposure.*

· ***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	*Handle under inert gas.*
P301+P310	*IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*
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:*** *Not applicable.*
· ***vPvB:*** *Not applicable.*

SECTION 3: Composition/information on ingredients

· ***3.1 Chemical characterisation: Substances***
· ***CAS No. Description***
1310-61-8 potassium hydrogensulphide
· ***Identification number(s)***
· ***EC number:*** *215-182-9*

SECTION 4: First aid measures

· ***4.1 Description of first aid measures***
· ***General information:***
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· ***After inhalation:***
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

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· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** Call for a doctor immediately.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:** No special measures required.
· **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **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.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.

· **Handling:** Handle under inert gas.
· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **7.2 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 container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **7.3 Specific end use(s)** No further relevant information 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:***
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
· ***Respiratory protection:***
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· ***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

· ***9.1 Information on basic physical and chemical properties***	
· ***General Information***	
· ***Appearance:***	
Form:	*Powder*
Colour:	*Whitish*
· ***Odour:***	*Like rotten eggs (mercaptans)*
· ***Odour threshold:***	*Not determined.*
· ***pH-value:***	*Not applicable.*
· ***Change in condition***	
Melting point/freezing point:	*Undetermined.*
Initial boiling point and boiling range:	*Undetermined.*
· ***Flash point:***	*Not applicable.*
· ***Flammability (solid, gas):***	*Flammable.*

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· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Auto-ignition temperature:**	Not determined.
· **Explosive properties:**	Not determined.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not applicable.
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapour density**	Not applicable.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Insoluble.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· **Solvent content:**	
Organic solvents:	0.0 %
VOC (EC)	0.00 %
Solids content:	100.0 %
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information 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 further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**
Harmful if swallowed or if inhaled.
· **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**
May cause an allergic skin reaction.

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· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity**
Suspected of causing cancer.
· **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**
May cause damage to organs through prolonged or repeated exposure.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:** Not known to be hazardous to water.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN3190
· **14.2 UN proper shipping name**	
· **ADR**	3190 SELF-HEATING SOLID, INORGANIC, N.O.S.
· **IMDG, IATA**	SELF-HEATING SOLID, INORGANIC, N.O.S.
· **14.3 Transport hazard class(es)**	
· **ADR**	

· **Class**	4

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· **Label**	4.2
· **IMDG, IATA**	
	
· **Class**	4.2 Substances liable to spontaneous combustion.
· **Label**	4.2
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **EMS Number:**	F-A,S-J
· **Stowage Category**	E
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	0
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· **IMDG**	
· **Limited quantities (LQ)**	0
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· **UN "Model Regulation":**	UN 3190 SELF-HEATING SOLID, INORGANIC, N.O.S., 4.2, II

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.
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Technical Department.
· **Contact:** Technical Director

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· ***Abbreviations and acronyms:***

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Sol. 1: Flammable solids – Category 1
Self-heat. 1: Self-heating substances and mixtures – Category 1
Acute Tox. 4: Acute toxicity – Category 4
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2