



Safety Data Sheet
According to Regulation EC No.
2020/87 to REACH

Effective date: 09/ 2019

Revision date: 26/4/2023

A-PPAS-H2S

This SDS consists of 7 pages

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

- 1.1 Product identifier: **A-PPAS-H2S, absorption solution**
UFI: V0Q3-TD88-DFD2-EA70
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:
Absorption solution for hydrogen sulphide – to be used for collecting air samples using an impinger
- 1.3 Details of the Supplier of the safety data sheet:
ALS Czech Republic s. r. o., Na Harfě 336/9, 190 00 Praha 9
Tel.: +420 284 081 600
email: info@alsglobal.com
Web: www.alsglobal.cz; www.alsglobal.com
Contact person responsible for information in this SDS:
customer.support@alsglobal.com
By Zbyněk Moravec
- 1.4 Emergency telephone number – Toxicological Information Centre
Na Bojišti 1, 128 08 Praha 2, tel.: 224915402; 224914575

SECTION 2. HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture according to CLP: Skin Corr. 1B
H314 Causes severe skin burns and eye damage.
- 2.2 Label elements:



Signal word: Danger

Hazard phrases:

H314 Causes severe skin burns and eye damage.

Precautionary phrases:

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.

P310 Immediately contact TOXICOLOGICAL INFORMATION CENTRE or



a physician

- 2.3 Other Hazards: none known. None of the components are in nanoform. None of the components, according to current knowledge, have the properties of an endocrine disruptor.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Compounds – n/a
3.2 Mixtures:

EC No.	Name	Content (%) general concentration limit; Specific concentration limit M-factor
CAS No.	Classification	
Index number	Classification CLP	
231-594-1	Potassium hydrogen sulfate	5 OCL: ≥1
7646-93-7	Skin Corr. 1B, H314 STOT SE 3 H335, GHS 05 Dgr.	
016-056-00-4		
233-653-7	Silver sulfate	2,5 OCL: ≥3 M=1000
10294-26-5	Eye Irrit. 2 H319; Skin. Irrit. 2 H315; STOT SE 3 H335;	
-	Aquatic Acute 1 H400, Aquatic chronic H410 GHS 07, GHS 09. wng	

A complete list of H-phrases is in Section 16

SECTION 4. FIRST AID MEASURES

- 4.1 Description of first aid measures
- If breathed in, move person into fresh air.
 - If swallowed, consult a physician, and show them either the label or this SDS. Never induce vomiting
 - If on skin, wash with plenty of soap and water.
 - If in eyes, rinse cautiously with water for at least 15 minutes, remove safely contact lenses. Always consult a physician even if symptoms do not persist.
- 4.2 Most important symptoms and effects, both acute and delayed: none known
- 4.3 Indication of any immediate medical attention and special treatment needed: medical attention necessary when nausea persists. Symptomatic treatment.

SECTION 5. FIRE FIGHTING MEASURES

- 5.1 Extinguishing media: not applicable, the mixture is not combustible.
Non-suitable extinguishing media: not applicable, the mixture is not combustible.
- 5.2 Special hazards arising from the substance or mixture: hydrogen released after contact with light metals (explosion hazard).



- 5.3 Advice for firefighters: the mixture is not combustible; corrosive effects; wear eye and skin protection equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment, and emergency procedures: eye and skin protection – the mixture is corrosive.
6.2 Environmental precautions: no special measures required
6.3 Methods and materials for containment and cleaning up: use plenty of water and a sorbent. Collect into sealed and labelled bottles.
6.4 Reference to other sections: Section 13

SECTION 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling: Keep containers tightly closed and store away from bases.
7.2 Conditions for safe storage, including any incompatibilities: do not expose to higher temperatures. Do not store together with lye. Avoid contact with light metals.
7.3 Specific end use(s): see Section 1, no special requirements.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters: according to GR No. 361/2007, Coll.
- | | PEL [mg.m^{-3}] | HPC [mg.m^{-3}] |
|--------------------------|----------------------------|----------------------------|
| Soluble silver compounds | 0.01 | 0.03 |

- 8.2 Exposure controls: always apply general safety rules for working with chemicals, do not eat, drink, smoke and inhale fumes and avoid contact with skin.

8.2.2 Individual protective measures, including personal protective equipment

Eye/face protection: tightly fitting safety goggles or face-shield

Skin protection: proper protective clothing, safety shoes

Hand protection: proper protective gloves (full contact: nitrile-rubber – 0.11 mm thick, Breakthrough time > 480 minutes).

The used gloves shall meet specification requirements stipulated in Regulation EU 89/686/EEC and the sequent technical standard EN 374, for instance, KCl 741 Dermatril ®L (full contact), KCl 741 Dermatril ®L (splash contact).

Respiratory protection: respirator, mask with an anti-dust filter, eventually self-contained breathing apparatus.

- 8.2.3 Environmental protection: prevent contamination of surface and ground water and soil, comply with emission limits.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties
- a) Physical state: liquid
 - b) Colour: colourless
 - c) Odour: odourless
 - d) Melting point/freezing point: $< 0^{\circ}\text{C}$
 - e) Initial boiling point and boiling range; $> 100^{\circ}\text{C}$
 - f) Flammability (solid, gas): not flammable
 - g) Upper/lower flammability or explosive limits: not applicable
 - h) Flash point: not applicable
 - i) Autoignition temperature: not applicable
 - j) Decomposition temperature: no data available
 - k) $\text{pH} < 3$
 - l) Kinematic viscosity: no data available
 - m) Solubility: soluble
 - n) N-octanol/water partition coefficient: no data available
 - o) Vapour pressure: no data available
 - p) Specific gravity: no data available
 - q) Vapour density: no data available
 - r) Particle characteristics: not applicable
- 9.2 Other safety information: no data available

SECTION 10. STABILITY AND REACTIVITY

- 10.1 Reactivity: no adverse reactions under common conditions, it reacts violently with Bases and light metals.
- 10.2 Chemical stability: Stable when under common conditions and when stored properly. Do not store together with lye. Rinse vessels with water before use.
- 10.3 Possibility of hazardous reactions: reacts violently with lye and light metals
- 10.4 Conditions to avoid: contact with lye
- 10.5 Incompatible materials: strong lye and light metals
- 10.6 Hazardous decomposition products: sulphur oxides

SECTION 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects: causes severe skin burns
- a) Acute toxicity: no data on acute toxicity available. Components of the mixture in the used concentrations are not classified as acute toxic.

Information on components:

Silver sulphate

Acute toxicity:

Orally LD50 5,000 mg/kg (rat)

- b) Skin corrosion/irritation; causes skin damage
- c) Serious eye damage/eye irritation: may cause serious eye damage
- d) Respiratory or skin sensitization: nil



- e) Germ cell mutagenicity: unknown, components are not classified as of CMR properties
- f) Carcinogenicity: unknown, components are not classified as of CMR properties
- g) Reproductive toxicity: unknown, components are not classified as of CMR properties
- h) Specific target organ toxicity - single exposure: components of the mixture in the used concentrations are not classified as STOT SE
- i) Specific target organ toxicity - repeated exposure: components of the mixture in the used concentrations are not classified as STOT SE
- j) Aspiration hazard: may be irritating to the respiratory tract,
- k) Chronic/sub-chronic toxicity: no data available

11.2 Other Hazards

11.2.1 Endocrine disrupting properties: none of the components of the mixture have endocrine disruptor properties.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity: the mixture is not classified as toxic to environment

Information on components:

Silver sulphate

Aquatic toxicity

EC50/48 hr 0.0015 mg/l (daphnia)

The multiplying factor 1,000 (Annex VI to CLP) was used to calculate aquatic toxicity, Table 4.1.1. of the Annex I to CLP was applied. Conclusion; the mixture is not classified as acute toxic to aquatic life.

LC50/96 hr 0.0049 mg/l (fish) *Pimephales promelas*

The multiplying factor 1,000 (Annex VI to CLP) was used to calculate aquatic toxicity, Table 4.1.2. of the Annex I to CLP was applied. Conclusion; the mixture is not classified as acute toxic to aquatic life.

12.2 Persistence and degradability: no long-term persistence in environment

12.3 Bio accumulative potential: nil

12.4 Mobility in soil: nil

12.5 Results of PBT and vPvB assessment: it belongs to no category

12.6 Endocrine disrupting properties: none of the components of the mixture have endocrine disruptor properties.

12.7 Other adverse effects: no further data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: Follow local regulations on packaging and waste disposal. They may vary in different countries. If compliant with local regulations, a small amount may be drained into sewers after it has been diluted in at least 1:30 ratio. European waste catalogue code 06 04 99 – wastes not otherwise specified



SECTION 14. TRANSPORT INFORMATION

The mixture is not classified as dangerous goods.

14.1 UN or ID number: 2509

14.2 UN proper shipping name: HYDROGENSÍRAN DRASELNÝ / POTASSIUM HYDROGEN SULFATE
ADR UN 2509

IATA UN – packing instructions

IMDG: substance not harmful to marine environment

14.3 Transport hazard class: 8

14.4 Packing group: 2

14.5 Environmental hazards: F-A, S-B

14.6 Special precautions for user: Prevent leakage into environment

14.7 Transport in bulk according to IMO Instruments: unknown

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture:

Act No. 350/2011 Coll., act No. 258/2000 Coll. as amended, act No. 541/2020 Coll. as amended and relevant implementing regulations.

GR No. 361/2007 Coll. as amended, Reg. EC 1272/2008

15.2 Chemical Safety Assessment carried out for: no component

SECTION 16. OTHER INFORMATION

The mixture shall be used only in compliance with directions for use and caution instructions shall be considered.

Only people qualified and trained in relevant method may use the mixture.

Conventional calculation methods were used to create this document based on data on properties of individual components, list of harmonized classifications and data provided by their manufacturers or importers.

Revised version as of 5/2022 has been formally adjusted to Reg. (EU) 2020/878.

Further H-phrases:

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Abbreviations

REACH: Regulation (EC) No 1907/2006

CLP: Regulation (EC) No 1272/2008

PEL: Permissible Exposure Limit

MPC: Maximum Permissible Concentration

BET: Biological Exposure Test

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

GCL: Generic Concentration Limit