

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

# POTASSIUM SULPHATE

Issue date:20.09.2023 Revision date: 20/09/2026 Version: 2.0 US / EN

## **SECTION 1. IDENTIFICATION**

1.1. Identification

Product name Potassium Sulphate
Trade name : Potassium Sulphate (SOP)

1.2. Recommended use and restrictions on use

Recommended use : Used in agricultural application as a water-soluble potassium

sulfur-containing chlorine-free fertilizer. Used in various fields of industry (for example, it is used to obtain alum and other chemical potassium compounds in metallurgy, as a charge component in glass production, and can be used in the phar-

maceutical and food industries).

1.3. Supplier

Manufacturer: : LLC «Almaz Fertilizers»

room 60, house 7, street Promyshlennaya, city Lermontov,

Stavropol Region, Russian Federation, 357341

T + 7(879-35) 3-06-72 info@a-group.com

<u>Distributor:</u> LLC «CASHMERE CAPITAL» 1N room, premises II, floor 5,

building 2, house 4/7, Vozdvizhenka street, Moscow, 125009,

Russia

T 8 800 505 44 17

sales@cashmere-cap.com

1.4 Emergency telephone number

For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11 Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No.US:001-800-424-9300 / Europe:001-703-527-3887

Note: please, consult with your local/national competent authorities for the emergency number in

your country.

## **SECTION 2. HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This substance is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29

CFR 1910.1200)

Label Elements

Hazards not otherwise classified (HNOC)

None identified

HMIS (Perceived): Health hazard: 1, Flammability: 0, Physical hazards: 0

NFPA (Perceived): Health hazard: 1, Fire: 0, Reactivity Hazard: 0

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

Classification and labelling according to Globally Harmonized System of Classification and Labelling of

Chemicals (GHS), ST/SG/AC.10/30/Rev.8

Hazard Class and Category Code(s): Hazard Statement(s):

Eye irritation, Category 2B Causes eye irritation



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Acute toxicity, oral, Category 5 May be harmful if swallowed Skin corrosion/irritation, Category 3 Causes mild skin irritation

2.2 Label elements:

Hazard pictogram (s) : None

Signal Word : Warning

Hazard statements : H320 Causes eye irritation

H303 May be harmful if swallowed H316 Causes mild skin irritation

Precautionary state:ments : P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P262: Do not get in eyes, on skin, or on clothing. P281: Use personal protective equipment as required.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 - IF INHALED: Remove victim to fresh air and keep

at rest in a position comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P337+313: If eye irritation persists get medical advice/attention.

**2.3 Other hazards:** No additional information available

2.4 Unknown acute toxicity No data available

(GHS-US)

## SECTION 3. COMPOSITION. INFORMATION ON INGREDIENTS

#### 3.1 Substance

Formula: K<sub>2</sub>O<sub>4</sub>S

Molecular weight: 174.26 g/mol

CAS-No.: 7778-80-5 EC-No.: 231-915-5

Chemical name	Concentration, wt. %	CAS-No
Potassium sulphate	≥99,3	7778-80-5

There are no additional ingredients, which are presented existing within the current supplier's knowledge and clas-sified, contributed to the substance's classification and consequently required reporting in this section.

## 3.2 Mixture

Not applicable

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

# 4.1. Description of first aid measures



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First-aid measures general : In the case of accident or if you feel unwell, seek medical advice

> immediately (show the label where possible). Never give anything by mouth to an unconscious person. Take off contaminated cloth-

ing and shoes.

I First-aid measures after

inhalation

contact

: If breathed in, move person into fresh air. Keep patient warm and at rest. Get medical advice or attention if you feel unwell.

First-aid measures after skin : In case of contact, flush skin with soap and plenty of water. If skin

irritation persists, call a physician.

First-aid measures after eye con: Protect unharmed eye. If easy to do, remove contact lens, if worn. In the case of contact with eyes, rinse with plenty of water and

seek medical advice. If symptoms persist, call a physician.

First-aid measures after ingestion : Rinse mouth with water. Get medical attention if you feel unwell.

## 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries Not expected to present a significant hazard under anticipated

conditions of normal use.

AFTER INHALATION OF DUST: Coughing, Irritation of the nasal Symptoms/injuries after inhalation

mucous membranes.

Symptoms/injuries after skin con- Slight irritation.

tact

Symptoms/injuries after eye contact Slight irritation.

Symptoms/injuries after ingestion AFTER ABSORPTION OF HIGH QUANTITIES: Feeling of weak-

ness. Nausea. Vomiting.

Diarrhoea, Disturbances of heart rate.

CONTINUOUS/REPEATED Chronic symptoms Sliaht irritation. ON

EXPOSURE/CONTACT: Tingling/irritation of the skin

## SECTION 5. FIRE-FIGHTING MEASURES

# 5.1 Extinguishing Media

: EXTINGUISHING MEDIA FOR SURROUNDING FIRES: All ex-Suitable extinguishing media

tinguishing media allowed. Foam. Dry powder. Carbon dioxide. Water spray. Sand. Adapt extinguishing media to the environ-

Unsuitable extinguishing media : No unsuitable extinguishing media known.

# 5.2 Special hazards arising from the substance or mixture

: DIRECT FIRE HAZARD. Non combustible. Fire hazard

Explosion hazard DIRECT EXPLOSION HAZARD. No direct explosion hazard. On burning: release of toxic and corrosive gases/vapours (phos-Reactivity

phorus oxides). Reacts violently with (some) acids.

5.3 Advice for firefighters

: Exposure to fire/heat: keep upwind. Exposure to fire/heat: con-Precautionary measures fire

sider evacuation. Exposure to fire/heat: have neighbourhood

close doors and windows...



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Firefighting instructions : Dilute toxic gases with water spray. Use water spray or fog for

> cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environ-

environment. Protection during firefighting: Heat/fire exposure: Protection during firefighting

compressed air/oxygen apparatus. Do not enter fire area without

proper protective equipment, including respiratory protection.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions : Use personal protective equipment. Evacuate personnel to safe

areas. Ensure adequate ventilation, especially in confined areas. Avoid dust formation. Avoid breathe dust. Avoid contact with skin

and eves.

6.2 Environmental precautions : Do not flush into surface water or sanitary sewer system. Prevent

further spillage if safe to do so. Avoid release to the environment.

6.3 Methods for cleaning up : Pick up and arrange disposal without creating dust. Sweep up and

shovel. Keep in suitable closed containers for disposal. Avoid

pollution of environment.

6.4 Reference to other sections : See section 8 for personal protective equipment and section 13 for

waste disposal.

## **SECTION 7. HANDLING AND STORAGE**

## 7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8. Avoid formation of dust. Avoid

breathe dust. Avoid contact with skin and eyes. Provide appropriate

exhaust ventilation at places where dust is formed.

fire and explosion

Advice on protection against : Normal measures for preventive fire protection.

# 7.2 Conditions for safe storage, including any incompatibilities

and containers

Requirements for storage areas : Store in a place accessible by authorized persons only. Protect from moisture. Keep container in a dry and well-ventilated place. Store in

paper bags, plastic bags, fabric polypropylene bags or specialized

soft containers.

: Joint storage with acids, alkalis, organic substances, oxidizing Advice on common storage

agents, pesticides, mineral additives, preservatives, fodder and

food products is prohibited.

Storage period : 12 months.

Other data : No data available.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



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# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls:

General industrial hygiene practice

Personal protective equipment

<u>Eye/face protection</u> Use equipment for eye protection tested and approved under

appropriate government standards such as NIOSH (US) or EN

166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use

proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws

and good laboratory practices. Wash and dry hands.

Body Protection Choose body protection in relation to its type, to the concentra-

tion and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous

substance at the specific workplace.

Respiratory protection : Respiratory protection is not required. Where protection from

nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as

NIOSH (US) or CEN (EU)..

Control of environmental expo-

sure

Personal protective equipment

(pictograms)

Do not let product enter drains









<u>Hygiene measures</u>: Handle in accordance with good industrial hygiene and safety

practice. General industrial hygiene practice. Avoid breathing dust. Avoid contact with skin, eyes and clothing. When using do not eat, drink or smoke. Wash hands before breaks and at the

end of workday. Follow the eyes and face protection plan.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state : Solid. Form : Crystals.

Color : white, yellowish or brown



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Odor : Odorless.

Odor threshold : No data available. Upper/lower flammability or : No data available.

explosive limits

Vapor density : Not applicable. The product is a solid at normal conditions. Vapor pressure : Not applicable. The product is a solid at normal conditions.

pH : 5.5 - 7.5

Relative density : No data available. Bulk density : No data available.

Melting point/freezing point : 1067 °C.
Solubility : Water; soluble.
Initial boiling point and boiling : No data available.

range

Flash point : Not applicable. The product does not evaporate.

Evaporation rate : Not applicable. The product is a solid at normal conditions.

Flammability (solid, gas) : Non-flammable. Partition coefficient: n- : Not applicable.

octanol/water

Auto-ignition temperature : No data available. Decomposition temperature : No data available.

Viscosity : Not applicable. The product is a solid at normal conditions.

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity** : No data available

**10.2 Chemical stability** : Stable under recommended storage conditions.

10.3 Possibility of hazardous

reactions

: No data available.

10.4 Conditions to avoid No data available.10.5 Incompatible materials Strong oxidizing agents

10.6 Hazardous decomposi- : Hazardou

tion products

: Hazardous decomposition products formed under fire conditions. - Sulphur oxides, Potassium oxides Other decomposition prod-

ucts - No data available In the event of fire: see section 5

## **SECTION 11. TOXICOLOGICAL INFORMATION**

#### 11.1 Information on toxicological effects

Inhalation : May cause respiratory irritation (not classification).

Eyes : Causes eye irritation.

Skin : Causes mild skin irritation (not classification).

Ingestion : There are no toxicological effects.

11.2 Sensitization of the respiratory / skin



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<u>Skin sensitization</u> : Not sensitizing for skin.

<u>Respiratory sensitization</u> : Non respiratory sensitizing.

11.3 Acute toxicity

Acute oral toxicity

Potassium sulphate :  $DL_{50}$  (rat): > 2 000 mg/kg

Acute dermal toxicity

Potassium sulphate :  $DL_{50}$  (rat): > 2 000 mg/kg

Acute inhalation toxicity

Potassium sulphate : LC<sub>50</sub> (rats): > 1.2 mg/l Exposure time: 4 h

**Chronic toxicity** 

No data available.

Mutagenicity

No mutagenic effect.

Carcinogenicity

No carcinogenic effect.

Reproductive toxicity

No reproductive effect.

**Aspiration hazard** 

Not applicable. The product is a solid at normal conditions.

#### **SECTION 12. ECOLOGICAL INFORMATION**

## 12.1 Ecotoxicity effects

Toxicity to fish:

Potassium sulphate : LC<sub>50</sub> (Gasterosteidae): > 869 mg/l

Exposure time: 96 h

LC<sub>50</sub> (Alburnus alburnus): > 2380 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

Potassium sulphate : LC<sub>50</sub> (Daphnia magna): > 890 mg/l

Exposure time: 48 h

Toxicity to aquatic plants:

Potassium sulphate EC<sub>50</sub> (Chlorella vulgaris): > 2700 mg/l

Exposure time: 18 day(s)



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Long-term study fish/daphnia and other aquatic invertebrates/aquatic plants:

No data available.

## 12.2. Persistence and degradability

Persistence Soluble in water. Persistence is unlikely, based on information available. Degradability Not relevant for inorganic substances.

## 12.3. Bioaccumulative potential Bioaccumulation is unlikely

12.4. Mobility in soil The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils

## 12.5. Results of PBT and vPvB assessment: No data available for assessmen

12.6. Other adverse effects

Endocrine Disruptor Information This product does not contain any known or suspected endocrine

Persistent Organic Pollutant This product does not contain any known or suspected substance Ozone Depletion Potential This product does not contain any known or suspected substance

# SECTION 13. DISPOSAL CONSIDERATIONS

## 13.1. Waste treatment methods

Waste from Residues / Unused

**Products** 

**Contaminated Packaging** Empty remaining contents. Dispose of in accordance with local

regulations. Do not re-use empty containers.

European Waste Catalogue

(EWC)

According to the European Waste Catalogue, Waste Codes are not

product specific, but application specific.

Other Information Waste codes should be assigned by the user based on the applica-

tion for which the product was used.

## SECTION 14. TRANSPORT INFORMATION

14.1 IMDG/IMO

**UN** number Not regulated UN proper shipping name Not regulated Transport hazard class(es) Not regulated Packing group Not regulated

14.2 ADR

**UN number** Not regulated UN proper shipping name Not regulated Transport hazard class(es) Not regulated Not regulated Packing group



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14.3 IATA

UN number

UN proper shipping name

Transport hazard class(es)

Packing group

Not regulated
Not regulated
Not regulated
Not regulated

**14.5. Environmental hazards**No hazards identified

**14.6. Special precautions for user**No special precautions required

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the

IBC Code Not applicable, packaged goods

## SECTION 15. REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Potassium	231-915-	-	-	Χ	Χ	-	Χ	Χ	Χ	Χ	Χ
sulfate	5										

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

## SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De

Minimis) reporting levels established by SARA Title III, Section 313.

## SARA 311/312 Hazards

No SARA Hazards

## **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act. **Pennsylvania Right To Know Components CAS-No.** 

Potassium sulfate 7778-80-5 Revision Date

New Jersey Right To Know Components

Potassium sulfate 7778-80-5 Revision Date

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

CAS-No.

U.S. Federal Regulations:		



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FIFRA : 40 CFR 180 - Tolerance and Exemptions from Tolerances for Pesticide Chemicals in Food

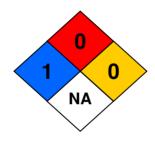
Potassium sulphate Present Section number 180.910

## **SECTION 16. OTHER INFORMATION**

Hazardous Material Information System (U.S.A.)

Health 1
Flammability 0
Physical Hazard 0
Personal Protection F

National Fire Protection Association (U.S.A.)



## **Preparation Information:**

Issue date: 20- September -2023 Revision Date: 20- September -2026

This document has been updated to comply with the US OSHA HazCom2012 Standard replacing the current legislation under 29 CFR 1910. 1200 to align with the GloballyHarmonized System of Classification and Labeling of Chemicals (GHS)

## Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information andbelief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text