

Safety Data Sheet

according to Regulation (EU) 2020/878



POTASSIUM ALUM / Aluminium potassium sulphate dodecahydrate Ph. Eur.

Date of issue: 20.12.2017

Revision date: 14.09.2021

Version/Replaced version: 6.0/5.1

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

1.1. Product identifier

Product form : Substance
Product name : POTASSIUM ALUM / Aluminium potassium sulphate dodecahydrate Ph. Eur.
Substance name : Aluminium potassium sulphate dodecahydrate
EC no : 233-141-3
CAS no : 7784-24-9
Registration no : 01-2119960162-44-xxxx

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Industrial use. Professional use.
Use of the substance/mixture : Manufacture of basic pharmaceutical products, Manufacture of textiles, Synthetic tanning agent, Flocculating agent, Starting product for pharmaceutical active principle, Cosmetics, personal care products

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Oker-Chemie GmbH
Im Schleeke 77
38642 Goslar - Germany
Tel.: +49 (0)5321 75153415

Safety Data Sheet: DLAC Dienstleistungsagentur Chemie GmbH, E-mail: sds@dlac-gmbh.de

1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number |
|---------|---|--|------------------------------------|
| Germany | Giftinformationszentrum (GIZ-Nord) Zentrum Pharmakologie und Toxikologie der Universität Göttingen | Robert-Koch Straße 40 37075 Göttingen | +49 551 19240 (German, English) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, the product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

According to Regulation (EC) No. 1272/2008 [CLP] labelling is not required

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance name : Aluminium potassium sulphate dodecahydrate
EC no : 233-141-3
CAS no : 7784-24-9

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|------|---|
| Aluminium potassium sulphate dodecahydrate | (CAS no) 7784-24-9 (EC no) 233-141-3 (Registration no) 01-2119960162-44-xxxx | ≥ 99 | Not classified |

3.2. Mixtures

Not applicable

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SECTION 4: First aid measures**4.1. Description of first aid measures**

- First-aid measures general : Get medical advice/attention if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Drink plenty of water as a precaution. Do NOT induce vomiting. Get medical advice/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.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

- Suitable extinguishing media : The product itself does not burn. Adapt extinguishing agents to the environment. Carbon dioxide. Dry extinguishing powder. Water spray. For a significant fire: Alcohol resistant foam.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Sulfuric oxides (SO_x)

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

- General measures : Provide adequate ventilation. Avoid dust formation.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate the danger area.

6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Dispose of in accordance with relevant local regulations. Avoid dust formation.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid dust formation. Do not breathe dust. Wear personal protective equipment

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Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Keep out of direct sunlight. Keep away from heat.

Prohibitions on mixed storage : Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Aluminium potassium sulphate dodecahydrate (7784-24-9) | | |
|--|--|--------------------------|
| United Kingdom | Local name | Aluminium salts, soluble |
| United Kingdom | WEL TWA (mg/m ³) | 2 mg/m ³ |
| Ireland | Local name | Aluminium salts, soluble |
| Ireland | OEL (8 hours ref) (mg/m ³) | 2 mg/m ³ |

| Aluminium potassium sulphate dodecahydrate (7784-24-9) | |
|--|----------------------------|
| DNEL/DMEL (Workers) | |
| Long-term - systemic effects, inhalation | 13.05 mg/m ³ |
| DNEL/DMEL (General population) | |
| Long-term - systemic effects, oral | 15.54 mg/kg bodyweight/day |
| PNEC (Water) | |
| PNEC aqua (freshwater) | 0.112 mg/l |
| PNEC aqua (marine water) | 0.011 mg/l |
| PNEC aqua (intermittent, freshwater) | 1.11 mg/l |
| PNEC (STP) | |
| PNEC sewage treatment plant | 63 mg/l |

8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation to minimize exposure to dust.

Hand protection : Not required. In case needed, wear suitable gloves (EN 374). Nitrile rubber, ≥ 0.35 mm, Natural rubber, Butyl rubber, ≥ 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection : Not required. In case needed, wear safety glasses (EN 166).

Skin and body protection : Not required. In case needed, wear suitable protective clothing.

Respiratory protection : No respiratory protection needed under normal use conditions. If the occupational exposure limit is exceeded or dust production: Respiratory protective device with particle filter P1. (EN 143).

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid, crystalline

Colour : White

Odour : Odourless

Melting point/freezing point : 90 °C

Boiling point or initial boiling point and boiling range : No data available

Flammability : No data available

Lower and upper explosion limit : No data available

Flash point : Not applicable

Auto-ignition temperature : Not applicable

Decomposition temperature : > 400 °C

pH : 3 - 3.5 (100 g/l H₂O at 20 °C)

Kinematic viscosity : Not applicable

Solubility : Water: ca. 105 g/l (20 °C)

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Partition coefficient n-octanol/water (log value) : Not applicable
Vapour pressure : No data available
Density and/or relative density : No data available
Relative vapour density : Not applicable
Particle characteristics : No data available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosive properties : Not explosive
Oxidising properties : No oxidising properties

9.2.2. Other safety characteristics

Bulk density : ca. 1000 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

No conditions to avoid known.

10.5. Incompatible materials

No incompatible materials known.

10.6. Hazardous decomposition products

Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Not classified
Based on available data, the classification criteria are not met.
LD50 oral mouse: > 2000 mg/kg (EU Method B.33) (NOAEL: 8160 mg/kg)
LD50 dermal mouse: > 2000 mg/kg (EPA OPP 81-2) (NOAEL: > 100 g/kg)
LC50 inhalation mouse: > 5 mg/m³ (NOAEL: 13.05 mg/l)

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met.
Rabbit, result: no skin irritation, 4 h (EPA OPP 81-5)

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met.
Rabbit, result: no eye irritation (OECD 405)

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met.
Mouse, result: Does not cause skin sensitisation. (EPA OPP 81-6)

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met.
Chromosome aberration test in vitro - Test species: Chinese hamster V79 cells with and without metabolic activation, result: negative (OECD 473)

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met.

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- Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met.
NOAEL oral rat: 31 mg/kg (OECD 416)
NOAEL oral rat: 4031 mg/kg (EPA OPPTS 870.3700)
- Specific target organ toxicity (single exposure) : Not classified
Based on available data, the classification criteria are not met.
- Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met.
NOAEL oral mouse: ≥ 8160 mg/kg (Directive 67/548/EWG, Annex V, B.33)
NOAEL inhalation mouse: ≥ 13.05 mg/l
NOAEL dermal human: 8.52 mg/kg
NOAEC inhalation rat: 6.2 mg/kg (Directive 67/548/EWG, Annex V, B.33)
- Aspiration hazard : Not classified
Based on available data, the classification criteria are not met.

11.2. Information on other hazards

- Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

- Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
- Acute aquatic toxicity : Not classified
Toxicity fish LC50 (Pimephales promelas): 110 mg/l, 96 h
Toxicity daphnia EC50 (Daphnia magna): 206 mg/l, 16 h
Toxicity algae EC50 (Chlorella vulgaris): 133.3 mg/l, 72 h
- Chronic aquatic toxicity : Not classified
Toxicity fish NOEC (Oncorhynchus mykiss): 5.58 mg/l, 7 d
Toxicity daphnia NOEC (Ceriodaphnia dubia): 21.54 mg/l, 7 d

12.2. Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Not required for inorganic substances.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

This product does not meet the PBT- or vPvB criteria of REACH regulation, annex XIII.

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Regional legislation (waste) : Dispose in a safe manner in accordance with local/national regulations.
- Waste treatment methods : Do not empty into drains.
- Waste code : The waste code number according to the Ordinance on the European Waste Catalogue (AVV) depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

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14.1. UN number or ID number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions
Contains no substance on the REACH Candidate List
Contains no substance on the REACH Annex XIV List

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Chemical safety assessments for this substance were carried out.

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Changes compared to earlier Versions : General revision, adaptation to regulation (EU) 2020/878

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Aluminium potassium sulfate dodecahydrate (7784-24-9)

Listed on: EINECS/REACH (Europe)
Listed on: NZIoC (New Zealand Inventory of Chemicals)
Listed on: AICS (Australian Inventory of Chemical Substances)
Listed on: TCSI (Taiwan's chemical substance inventory)
Listed on: PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Abbreviations and acronyms:

| | |
|--------|---|
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No-Effect Level |
| EC50 | The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration) |
| IATA | International Air Transport Association |
| IMDG | "International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea |
| LC50 | Lethal Concentration to 50 % of a test population (Median Lethal Concentration) |
| LD50 | Lethal Dose to 50% of a test population (Median Lethal Dose) |
| NOEC/L | No Observed Effect Concentration/Level |
| OECD | Organisation for Economic Cooperation and Development |
| PBT | Persistent, Bioaccumulative and Toxic substance |
| PNEC | Predicted No-Effect Concentration |
| REACH | Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals |
| SDS | Safety Data Sheet |
| STP | Sewage Treatment Plant |
| vPvB | Very Persistent and Very Bioaccumulative |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.