

Safety Data Sheet

according to Regulation (EU) No. 2015/830



POTASSIUM ALUM

Date of issue: 20.12.2017

Revision date: 14.05.2019

Version: 5.0

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

1.1. Product identifier

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

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
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

No additional information available

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	≥ 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 : Use a self-contained breathing apparatus and also a protective suit.

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 : Wear suitable protective clothing. Self-contained breathing apparatus.

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 : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. 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.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Contaminated work clothing should not be allowed out of the workplace. 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. Take off contaminated clothing and wash it before reuse.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Store tightly closed in a dry and cool 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 (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 : 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 : Chemical goggles or face shield (EN 166).

Skin and body protection : Wear suitable protective clothing (EN 13034).

Respiratory protection : Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protective device with particle filter EN 143 - P1.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance : White crystalline solid

Odour : Odourless

Odour threshold : No data available

pH : 3 - 3.5 (100 g/l H₂O at 20 °C)

Melting point/freezing point : 90 °C

Initial boiling point and boiling range : No data available

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper/lower flammability or explosive limits : No data available

Vapour pressure : No data available

Vapour density : No data available

Relative density : No data available

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

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : > 400 °C

Viscosity : Not applicable

Explosive properties : No data available

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Oxidising properties : No oxidising properties

9.2. Other information

Bulk density : ca. 1000 kg/m³
Burning number : No data available
Dust explosion class : No data available

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 toxicological effects

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)
LC50 inhalation mouse: > 5 mg/m³ (NOAEL: 13.05 mg/l)
LD50 dermal mouse: > 2000 mg/kg (EPA OPP 81-2) (NOAEL: > 100 g/kg)

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.

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.

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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.
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	: This product contains no hazardous components for the aquatic 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	: 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. 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

14.1. UN 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
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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. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

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
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration

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LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rai
SDS	Safety data sheet
vPvB	Very Persistent and Very Bioaccumulative

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.