

According to directive 1907/2006/EC, 2020/878

Page 1 from 9

Version 4.1

Revision date: 19-09-2024

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate $\geq 98\%$, p.a., ACS

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

1.1 Product identification:

Product name/name: Potassium aluminium sulphate dodecahydrate $\geq 98\%$, p.a., ACS

Registration number (REACH): Registration of the identified uses is not necessary as the substance is not subject to registration in accordance with the REACH regulation (< 1 t/a).

EC number: 233-141-3

CAS no: 7784-24-9

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

Identified uses: Laboratory chemicals.
Analytical and laboratory applications.

Uses advised against: Not to be used for private purposes (household).
Food, drinks and animal feed.

1.3 Details of the supplier of the safety data sheet:

Responsible distributor : ASSYST bvba / A.S.O.W. bvba
Hellegatstraat 13a
2590 Berlaar
Belgium
Tel: +32 495 50 61 14 / +32 496 83 70 27
Website: www.assyst.org / www.artsuppliesonweb.com
Email: ao@assyst.org / vera.opsommer@assyst.org

1.4 Emergency phone number:

For Belgium: Call the **Poison Control Centre (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.

NHS 24 Direct For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture:

Classification according to directive (EC) No 1272/2008 and its amendments.

This substance does not meet the criteria for classification according to Regulation No 1272/2008/EC.

2.2 Labelling elements:

Labelling according to regulation (EC) No 1272/2008 [CLP/GHS]:

Not required.

2.3 Other hazards:

Results of PBT and vPvB assessment

The results of the assessment of the substance show that it is not a PBT or vPvB substance.

Endocrine-disrupting properties

Contains no endocrine disruptor (ED) at a concentration of $\geq 0.1\%$.

SECTION 3: Composition and information on ingredients

3.1 Substances:

Name of substance: Potassium aluminium sulphate dodecahydrate

Molecular formula: $KAl(SO_4)_2 \cdot 12 H_2O$

According to directive 1907/2006/EC, 2020/878

Version 4.1

Revision date: 19-09-2024

Page 2 from 9

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate $\geq 98\%$, p.a., ACS

Molar mass: 474.4 g/mol

CAS no: 7784-24-9

EC no: 233-141-3

SECTION 4: First aid measures

4.1 Description of first-aid measures:

General comments

Remove contaminated clothing immediately.

When inhaled

Provide fresh air.

If in doubt or if symptoms persist, consult a doctor.

In case of skin contact

Rinse/shower skin with water.

On eye contact

Rinse gently with water for several minutes.

If in doubt or if symptoms persist, consult an ophthalmologist.

If swallowed

Rinsing the mouth.

If you feel unwell, consult a doctor.

4.2 Main acute and delayed symptoms and effects

No symptoms and effects are known so far.

4.3 Indication of any immediate medical care and special treatment needed

None.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing agents

Match fire-fighting measures to the environment!

Water, foam, alcohol-resistant foam, dry extinguishing powder, ABC powder.

Unsuitable extinguishing agents

Full water jet.

5.2 Special hazards arising from the substance or mixture

Non-flammable.

Hazardous combustion products:

In case of fire, sulphur oxides (SOx) may be formed.

5.3 Advice for firefighters

In case of fire and/or explosion, avoid breathing fumes.

With normal precautions, extinguish from a reasonable distance.

Wear self-contained breathing apparatus.

SECTION 6: Measures in case of accidental release of the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

For persons other than emergency services

No special measures are necessary.

6.2 Environmental precautions

Avoid getting the product into drains, surface water or groundwater.

Retain and remove contaminated wash water.

6.3 Containment and cleaning methods and materials

Advice on how to contain the spill

Covering drains.

Mechanical recording.

Advice on how to clean up the spill

According to directive 1907/2006/EC, 2020/878

Page 3 from 9

Version 4.1

Revision date: 19-09-2024

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate ≥98%, p.a., ACS

Mechanical recording.

Other information relating to the discharge or release

Put into suitable retainers for disposal.

6.4 Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Instructions for disposal: see section 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling of the substance or mixture:

No special measures are necessary.

Advice on general occupational hygiene

Keep away from food, drink and animal feed.

7.2 Conditions for safe storage, including incompatibilities

Store in a dry place.

Incompatible substances or mixtures

Note advice for chemical storage.

Incompatible materials: see section 10.

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25°C.

7.3 Specific end use

No information is available.

SECTION 8: Exposure controls/personal protection measures

8.1 Control parameters:

National limits

Occupational exposure limits (occupational exposure limits)

This information is not available.

Human health values

Relevant DNEL and other thresholds				
End point	Threshold	Route of exposure	Used in	Exposure time
DNEL	13.05 mg/m ³	human, via inhalation	(industrial) employees	chronic - systemic effects

Environmental values

Relevant PNEC and other thresholds				
End point	Threshold	Organism	Environmental compartments	Exposure time
PNEC	0.112 mg/l	Aquatic organisms	fresh water	short-term (one-off)
PNEC	0.011 mg/l	Aquatic organisms	Seawater	short-term (one-off)
PNEC	63 mg/l	Aquatic organisms	Sewage treatment plants (STP)	short-term (one-off)

8.2 Exposure control measures

Individual protection measures (personal protective equipment)

Eye/face protection

Wear safety goggles with side protection.

Skin protection

Hand protection

Wear suitable gloves.

Suitable are EN 374-tested gloves against chemicals.

Type of material

NBR (nitrile rubber)

Material thickness

>0.3 mm

Breakthrough time of glove material

According to directive 1907/2006/EC, 2020/878

Page 4 from 9

Version 4.1

Revision date: 19-09-2024

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate $\geq 98\%$, p.a., ACS

>480 minutes (permeation level: 6)

Other protective equipment

Insert rest periods for skin regeneration.

Preventive skin protection (skin-protective creams) is recommended.

Protection of respiratory organs

Respiratory protection is necessary in case of: Dust generation.

Particle filter (EN 143).

P1 (filters at least 80% of air particles, colour code: white).

Managing environmental exposure

Avoid getting the product into drains, surface water or groundwater.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	solid
Form:	powder, crystalline
Colour:	white
Odour:	odourless
Melting/freezing point:	92.5 °C at 101.3 kPa (ECHA)
Boiling point or initial boiling point and boiling range:	undetermined
Flammability:	non-flammable
Lower and upper explosion limit:	irrelevant (solid)
Flash point:	not applicable
Self-ignition temperature:	undetermined
Decomposition temperature:	65 °C at 101.3 kPa (ECHA)
pH value:	3 - 3.5 (in aqueous solution: 100 g/l, 20 °C)
Kinematic viscosity:	irrelevant

Solubility

Solubility in water: 139 g/l at 20 °C

Partition coefficient

Partition coefficient n-octanol/water (log value): not relevant (inorganic)

Vapour pressure: not determined

Density and/or relative density

Density: 1.75 g/cm³ at 20 °C (ECHA)

Relative vapour density: irrelevant (solid)

Bulk density: ~900 kg/m³

Particle characteristics:

Particle size: No data available.

Other safety parameters

Oxidising properties: None

9.2 Other information

Information on physical hazard classes: hazard classes in accordance with GHS (physical hazards): not relevant.

Other safety features: There is no further information.

SECTION 10: Stability and reactivity

10.1 Reactivity:

This substance is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal atmospheric conditions and expected temperature and pressure during storage and handling.

10.3 Possible hazardous reactions

Violent reaction with: Strong lye.

According to directive 1907/2006/EC, 2020/878

Page 5 from 9

Version 4.1

Revision date: 19-09-2024

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate $\geq 98\%$, p.a., ACS**10.4 Conditions to avoid**

Keep away from heat.

Decomposition occurs from temperatures of: 65 °C at 101.3 kPa.

10.5 Incompatible materials

There is no further information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information**11.1 Information on toxicological effects:****Classification according to GHS (1272/2008/EC, CLP)****Acute toxicity**

Is not classifiable as acutely toxic.

Route of exposure	End point	Value	Species	Method	Source
Oral	LD50	>2,000 mg/kg	Mouse	anhydrous	ECHA

Skin corrosion/irritation

Is not classifiable as corrosive/irritating to the skin.

Serious eye damage/eye irritation

Cannot be classified as severely eye-injurious or irritating to the eyes.

Respiratory or skin sensitisation

Is not classifiable as inhalant or skin allergenic.

Mutagenicity in gametes

Is not classifiable as mutagenic in germ cells (mutagenic).

Carcinogenicity

Is not classifiable as carcinogenic.

Reproductive toxicity

Is not classifiable as a reproductive toxicant.

Specific target organ toxicity at single exposure

Cannot be classified as toxic to specific target organs (single exposure).

Specific target organ toxicity on repeated exposure

Cannot be classified as toxic to specific target organs (repeated exposure).

Inhalation hazard

Is not classifiable as dangerous in aspiration.

Symptoms related to physical, chemical and toxicological properties

- After swallowing

No data are available.

- In case of contact with eyes

No data are available.

- After inhalation

No data are available.

- On contact with skin

No data are available.

- Other information

Based on the pH value (see section 9), skin and eye irritation cannot be ruled out.

11.2 Additional informationContains no endocrine disruptor (ED) at a concentration of $\geq 0.1\%$.**11.3 Information on other hazards**

There is no further information.

SECTION 12: Ecological information**12.1 Toxicity:**

Cannot be classified as hazardous to the aquatic environment.

According to directive 1907/2006/EC, 2020/878

Page 6 from 9

Version 4.1

Revision date: 19-09-2024

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate ≥98%, p.a., ACS

Aquatic toxicity (acute)				
End point	Value	Species	Source	Exposure time
LC50	>100 mg/l	Fish	ECHA	48 h
EC50	≤960 mg/l	aquatic invertebrates	ECHA	96 h
Aquatic toxicity (chronic)				
End point	Value	Species	Source	Exposure time
NOEC	206 mg/l	aquatic invertebrates	ECHA	16 h
NOEC	176.7 mg/l	Alg	ECHA	30 d

12.2 Persistence and Degradability:

No data are available.

12.3 Bioaccumulation:

No data are available.

12.4 Mobility in soil:

No data are available.

12.5 Results of PBT and vPvB assessment

No data are available.

12.6 Endocrine disrupting properties

Contains no endocrine disruptor (ED) at a concentration of ≥ 0.1%.

12.7 Other adverse effects

No data are available.

SECTION 13: Disposal instructions**13.1 Waste treatment methods:**

For waste disposal, contact the responsible authorised waste disposal company.

Information regarding wastewater discharge

Do not throw waste into the sink.

Waste treatment of containers/packaging

Contaminated packaging can be treated like the substance itself.

Fully emptied containers can be recycled.

Relevant provisions on waste prevention

The allocation of waste key numbers/waste markings should be industry- and process-specific in accordance with AVV.

Comments

Waste is separated into the categories that can be treated separately by local or national waste management services.

Please note the relevant national or regional provisions.

Uncontaminated and completely empty containers can be used again.

SECTION 14: Information relating to transport**14.1 UN number or ID number**

Not subject to transport regulations.

14.2 Proper cargo name according to UN model regulations

Not granted.

14.3 Transport hazard class(es)

None.

14.4 Packing group

Not granted.

14.5 Environmental hazards

Not hazardous to the environment, according to regulations for the transport of dangerous goods.

14.6 Special precautions for the user

There is no further information.

14.7 Sea transport in bulk in accordance with IMO instruments

The cargo is not meant to be transported in bulk.

According to directive 1907/2006/EC, 2020/878

Page 7 from 9

Version 4.1

Revision date: 19-09-2024

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate ≥98%, p.a., ACS

14.8 Information for each of the UN regulations**Transport of dangerous goods by road, rail or inland waterway (ADR/RID/ADN) - Additional information**

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to the IMDG.

International Civil Aviation Organisation (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

SECTION 15: Statutory information15.1 Safety, health and environmental regulations and legislation specific to the substance or mixture:**Relevant European Union (EU) provisions****Restrictions in accordance with REACH, Annex XVII****Restricted hazardous substances (REACH, Annex XVII)**

Not listed

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

not listed

Seveso Directive**2012/18/EU (Seveso III)**

No.	Hazardous substance/hazard categories	Thresholds (tonnes) for application of requirements for lower and upper-tier establishments	Nuts
	Not awarded		

Decopaint Directive

VOC content: 0 %

VOC content: 0 g/l

Directive on industrial emissions (IE Directive)

VOC content: 0 %

VOC content: 0 g/l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

Not stated.

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Not stated.

Water framework directive (WFD)**List of pollutants (WFD)**

Name of substance	Name according to inventory	CAS No.	Included in	Comments
Potassium aluminium sulphate dodecahydrate	Metals and metal compounds		a)	

Legend

(a) Indicative list of the main pollutants

Regulation on marketing and use of explosives precursors

Not stated.

Regulation on drug precursors

Not stated.

Regulation on ozone-depleting substances

Not stated.

Regulation on export and import of dangerous chemicals (PIC)

Not stated.

Regulation on persistent organic pollutants (POPs)

Not stated.

Other information

Directive 94/33/EC on the protection of young people at work. Observe work restrictions in accordance with the Pregnancy Directive (92/85/EEC) for expectant or nursing mothers.

According to directive 1907/2006/EC, 2020/878

Page 8 from 9

Version 4.1

Revision date: 19-09-2024

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate $\geq 98\%$, p.a., ACS**National inventories**

Country	List	Status
AU	AIIC	substance is mentioned
CN	IECSC	substance is mentioned
EU	ECSI	substance is mentioned
EU	REACH Reg.	Fabric is mentioned
JP	CSCL-ENCS	substance is mentioned
KR	KECI	substance is mentioned
NZ	NZIoC	substance is mentioned
PH	PICCS	substance is mentioned
TW	TCSI	substance is mentioned
UN	NCI	substance is mentioned

Legend

AIIC:	Australian Inventory of Industrial Chemicals
CICR:	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
ECSI:	EC inventory (EINECS, ELINCS, NLP)
IECSC:	Inventory of Existing Chemical Substances Produced or Imported in China
KECI:	Korea Existing Chemicals Inventory
NCI:	National Chemical Inventory
NZIoC:	New Zealand Inventory of Chemicals
PICCS:	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg:	REACH registered substances
TCSI:	Taiwan Chemical Substance Inventory

15.2 Chemical safety assessment:

No chemical safety assessment has been carried out for this substance.

SECTION 16: Other information**Indication of changes (revised safety data sheet)**

Aligning with regulation: Regulation (EC) No 1907/2006 (REACH), amended by 2020/878/EU.

Section 2.3:Endocrine-disrupting properties: Contains no endocrine disruptor (ED) at a concentration of $\geq 0.1\%$.**Abbreviations and acronyms**

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road (ADR Agreement); AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Association for the Testing of Materials; bw - Body Weight; CLP - Regulation on Classification, Labelling and Packaging; Regulation (EC) No 1272/2008; CMR - Carcinogenic, mutagenic or toxic to reproduction; DIN - Standard of the German Institute for Standardisation; DSL - List of substances used indoors (Canada); ECHA - European Chemicals Agency; EC-Number - EINECS number; ECx - Concentration associated with x% response; ELx - Charge capacity associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemicals (Japan); ErCx - Concentration associated with x% growth response; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - IMO International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk; IC50 - Half-Maximum Inhibitory Concentration; ICAO - International Civil Aviation Organisation; IECSC - Inventory List of Existing Chemicals in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korean Inventory of Existing Chemicals; LC50 - Lethal concentration for 50% of a test population; LD50 - Lethal dose for 50% of a test population (lethal dose median); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not otherwise specified; NO(A)EC - No discernible (negative) effect on concentration; NO(A)EL - No discernible (negative) effect on Level; NOELR - No discernible effect on cargo capacity; NZIoC - New Zealand inventory of chemicals; OECD - Organisation for Economic Co-operation and Development OECD; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, bioaccumulative and toxic substance; PICCS - Philippine inventory of chemicals and chemical substances; (Q)SAR - (Quantitative) structure-activity relationships; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning

According to directive 1907/2006/EC, 2020/878

Page 9 from 9

Version 4.1

Revision date: 19-09-2024

Print date: 19-12-2024

Trade name: Potassium aluminium sulphate dodecahydrate $\geq 98\%$, p.a., ACS

the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH); RID - Regulations concerning the International Carriage of Dangerous Goods by Rail (RID); SADT - Self-accelerating decomposition temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwanese Inventory of Chemical Substances; TECL - Inventory of Chemical Substances Existing in Thailand; TRGS - Technical Regulation on Hazardous Substances; TSCA - Toxic Substances Control Act (USA); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Training advice:

Provide proper information, instruction and training for users.

Reference documents:

Regulation (EC) No 1272/2008 on classification, labelling and packaging (CLP) of substances and mixtures.

Regulation (EC) No 1907/2006 (REACH), as amended by 2020/878/EU.

Transport of dangerous goods by road, rail or inland waterways (ADR/RID/ADN).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for aviation (IATA).

Rejection of liability

This information is based on the current state of our knowledge. This safety data sheet has been compiled and is exclusively intended for this product.