

**ALUMINIUM SULPHATE, SOLID**

Version 1.0

Revision Date 15.05.2009

Print Date 15.05.2009

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : ALUMINIUM SULPHATE, SOLID

Use of the Substance/Preparation : Flocculating agent, Pulp chemicals and paper auxiliaries, Agent for water treatment

Company : OKER-CHEMIE GMBH
Im Schleeke 77
38642 Goslar
Germany

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E-mail address : infoSDS@hcstarck.com

Responsible Department : Corporate HSEQ & SIS - Product Safety

Emergency telephone : +49(0)551/19240

2. HAZARDS IDENTIFICATION**Classification**

Risk of serious damage to eyes.

Additional risk advice to man and the environment

May be corrosive to metals.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical nature**

Substance

Hazardous components

Chemical Name	CAS-No.	EC-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Aluminiumsulfat-tetradecahydrat	16828-12-9	233-135-0	Xi	R41	>= 98

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

If inhaled : Remove to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and water.
If skin irritation occurs, seek medical advice/attention.

In case of eye contact : Flush affected eyes with plenty of water immediately and call a physician.



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If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Extinguishing methods depends upon fire in vicinity poses.
The product itself does not burn.

Extinguishing media which shall not be used for safety reasons : None known.

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases : sulfuric oxides (SO_x) - Toxic, Corrosive

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

Additional advice : Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Avoid formation and deposition of dust.
Effective exhaust ventilation system
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.
Use personal protective equipment.

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

Methods for cleaning up : Use mechanical handling equipment.
Avoid dust formation.
Fill into labelled, sealable containers.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : Avoid dust formation.
Do not breathe dust.
Ensure adequate ventilation and, if necessary, exhaust ventilation when handling or transferring the product.
Avoid contact with the skin and the eyes.
Ensure that the occupational exposure limit value/s (OEL) and/or other limit values are complied with.

Advice on protection against fire and explosion : No special precautions required.



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Storage

Requirements for storage areas and containers : Comply with the directives governing water law

Further information on storage conditions : Store in tightly closed containers in a dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit Values

ALUMINIUM SALTS, SOLUBLE; CAS-No.: 16828-12-9

Basis : EH40 (UK)

Threshold limits TWA : 2 mg/m³

Aluminium sulfate; CAS-No.: 16828-12-9

Basis : OEL (EU)

Note : No limit value established.

Personal protective equipment

Respiratory protection : Respiratory protective device with combination filter EN 14387 B - P2

Hand protection : Glove material: Butyl-rubber, Natural rubber, Nitrile rubber
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Safety glasses

Body Protection : Protective suit

General protective measures : Handle in accordance with good industrial hygiene and safety practice. Keep working clothes separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : fine-grained up to lumpy
hygroscopic

Color : colourless

Odor : odorless

Safety data

pH : ca. 3
at 1 %

Change in physical state

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- **Melting point/range** : 650 °C
- Flammability (contact with water)** : not highly flammable
Method: Directive 67/548/EEC Annex V, A.12.
- Dust explosibility** : no data available
- Explosion limits**
- **Lower explosion limit** : no data available
- Solubility**
- **Water solubility** : 629 g/l

10. STABILITY AND REACTIVITY

- Conditions to avoid** : > 50 °C
- Materials to avoid** : Metals
Bases
- Thermal decomposition** : > 400 °C
- Hazardous decomposition products** : Sulphur oxides

11. TOXICOLOGICAL INFORMATION

- Eye irritation**
Aluminiumsulfat-tetradecahydrat : Risk of serious damage to eyes.

12. ECOLOGICAL INFORMATION

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

- Product** : The Federal, regional and local rules and regulations governing disposal must be complied with.
- : This product cannot be classified with disposal identification key acc. to the EU disposal directives as a classification results from the intended utilisation purpose of the consumer
- Packaging** : Packaging that is not contaminated and has been cleaned can be recycled.

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14. TRANSPORT INFORMATION**Land transport ADR/RID**

Not dangerous goods

Air transport ICAO-TI/IATA-DGR

Not dangerous goods

Sea transport IMDG

Not dangerous goods

15. REGULATORY INFORMATION**Labelling according to EC Directives****Directive 67/548/EEC**

Labelling required

Symbol(s)

Xi Irritant

Hazardous components which must be listed on the label:**contains :**

Aluminiumsulfat-tetradecahydrat

R-phrases(s)

R41 Risk of serious damage to eyes.

S-phrases(s)

S22 Do not breathe dust.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 Wear suitable gloves and eye/face protection.

S60 This material and its container must be disposed of as hazardous waste.

National legislation

Major Accident Hazard Legislation : 96/82/EC
Annex I
Number: Is not subject to the Seveso II Directive.

Other regulations : Comply with the directives acc to the EU Maternity Protection Act (92/85/EEC) with regard to occupational restrictions.
Take note of Dir 94/33/EC on the protection of young people at work.



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16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R41 Risk of serious damage to eyes.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief 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. The above details do not imply any guarantee concerning composition, properties or performance.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.