

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

### • 1.1 Product identifier

#### • Trade name: Flockfix Kartuschen

- Article number: 0908
- CAS Number:  
16828-12-9
- EC number:  
233-135-0
- Registration number 01-2119531538-36-XXXX, 05-2115122209-56-0000
- UFI: U6A6-U53Q-SU06-354S

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

No further relevant information available.

#### • Application of the substance / the mixture Water treatment

### • 1.3 Details of the supplier of the safety data sheet

#### • Manufacturer/Supplier:

Chemoform AG  
Bahnhofstr. 68, D-73240 Wendlingen  
Tel: +49 7024 4048-0, Fax: +49 7024 4048-2800, E-Mail: info@chemoform.com

#### • Further information obtainable from: datenblatt@chemoform.com

### • 1.4 Emergency telephone number:

In England and Wales:  
NHS 111 - dial 111

In Scotland:  
NHS 24 - dial 111

## SECTION 2: Hazards identification

### • 2.1 Classification of the substance or mixture

#### • Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

### • 2.2 Label elements

#### • Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

#### • Hazard pictograms



GHS05

#### • Signal word Danger

#### • Hazard-determining components of labelling:

aluminium sulphate

#### • Hazard statements

H318 Causes serious eye damage.

#### • Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P310 Immediately call a POISON CENTER/doctor.

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 25.06.2020

Version number 12

Revision: 25.06.2020

**Trade name: Flockfix Kartuschen**

(Contd. of page 1)

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- PBT: Not applicable.
- vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**  
16828-12-9 Aluminium sulphate
- **Identification number(s)**
- EC number: 233-135-0

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Call a doctor immediately.
- **After eye contact:**  
Call a doctor immediately.  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Seek medical treatment.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
Water spray  
Foam  
Fire-extinguishing powder  
Carbon dioxide  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Sulphur dioxide (SO<sub>2</sub>)
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Avoid formation of dust.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Send for recovery or disposal in suitable receptacles.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

GB  
(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 25.06.2020

Version number 12

Revision: 25.06.2020

Trade name: Flockfix Kartuschen

(Contd. of page 2)

### SECTION 7: Handling and storage

#### • 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.  
see item 8

#### • Information about fire - and explosion protection: The product is not flammable.

#### • 7.2 Conditions for safe storage, including any incompatibilities

##### • Storage:

- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.

#### • 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

#### • Additional information about design of technical facilities: No further data; see item 7.

#### • 8.1 Control parameters

#### • Ingredients with limit values that require monitoring at the workplace:

##### 10043-01-3 aluminium sulphate

OES Long-term value: 2 mg/m<sup>3</sup>

- Additional information: The lists valid during the making were used as basis.

#### • 8.2 Exposure controls

##### • Personal protective equipment:

- General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

- Respiratory protection:

Not necessary if room is well-ventilated.

Short term filter device:

Filter P1

- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Chloroprene rubber, CR

Natural rubber, NR

Nitrile rubber, NBR

PVC gloves

- Not suitable are gloves made of the following materials:

Leather gloves

Strong material gloves

- Eye protection:



Tightly sealed goggles

- Body protection: Protective work clothing

GB  
(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 25.06.2020

Version number 12

Revision: 25.06.2020

Trade name: Flockfix Kartuschen

(Contd. of page 3)

### SECTION 9: Physical and chemical properties

#### • 9.1 Information on basic physical and chemical properties

##### • General Information

##### • Appearance:

Form:	Solid
Colour:	White colourless

• Odour: Characteristic  
• Odour threshold: Not determined.

• pH-value: Not applicable.

##### • Change in condition

Melting point/freezing point:	770 °C
Initial boiling point and boiling range:	Undetermined.

• Flash point: Not applicable.

• Flammability (solid, gas): Product is not flammable.

• Decomposition temperature: Not determined.

• Auto-ignition temperature: Not determined.

• Explosive properties: Product does not present an explosion hazard.

##### • Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

• Vapour pressure: Not applicable.

• Density at 20 °C: 2.71 g/cm<sup>3</sup>

• Relative density: Not determined.

• Vapour density: Not applicable.

• Evaporation rate: Not applicable.

##### • Solubility in / Miscibility with

water at 20 °C:	300 g/l
-----------------	---------

• Partition coefficient: n-octanol/water: Not determined.

##### • Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.

Solids content:	100.0 %
-----------------	---------

• 9.2 Other information: No further relevant information available.

### SECTION 10: Stability and reactivity

• 10.1 Reactivity: No further relevant information available.

##### • 10.2 Chemical stability

##### • Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.  
Loss of constitutional water on heating.

• 10.3 Possibility of hazardous reactions: Reacts with alkali (lyes).

• 10.4 Conditions to avoid: No further relevant information available.

• 10.5 Incompatible materials: strong bases

##### • 10.6 Hazardous decomposition products:

Sulphur oxides (SO<sub>x</sub>)  
Sulphur oxides

### SECTION 11: Toxicological information

#### • 11.1 Information on toxicological effects

• Acute toxicity: Based on available data, the classification criteria are not met.

(Contd. on page 5)

GB

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 25.06.2020

Version number 12

Revision: 25.06.2020

**Trade name: Flockfix Kartuschen**

(Contd. of page 4)

- LD/LC50 values relevant for classification:

**10043-01-3 aluminium sulphate**

Oral LD50 6,200 mg/kg (mouse)

- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation  
Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

**10043-01-3 aluminium sulphate**

LC50 &gt;160 mg/l (daphnia) (OECD 218)

&gt;1,000 mg/l (Danio rerio (Zebraabärbling))

- **12.2 Persistence and degradability**

Anorganic product, is not eliminable from water by means of biological cleaning processes.

- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packaging may be reused or recycled after cleaning.

- Recommended cleansing agents: Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, ADN, IMDG, IATA**

Void

- **14.2 UN proper shipping name**

- **ADR, ADN, IMDG, IATA**

Void

- **14.3 Transport hazard class(es)**

- **ADR, ADN, IMDG, IATA**

- Class

Void

- **14.4 Packing group**

- **ADR, IMDG, IATA**

Void

- **14.5 Environmental hazards:**

Not applicable.

(Contd. on page 6)

GB

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 25.06.2020

Version number 12

Revision: 25.06.2020

**Trade name: Flockfix Kartuschen**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• <b>14.6 Special precautions for user</b></li> <li>• <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b></li> <li>• <b>Transport/Additional information:</b></li> <li>• <b>UN "Model Regulation":</b></li> </ul> | <p style="text-align: right;">(Contd. of page 5)</p> <ul style="list-style-type: none"> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not dangerous according to the above specifications.</li> <li>Void</li> </ul> |
|---|---|

### SECTION 15: Regulatory information

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

- \* Data compared to the previous version altered.

GB