

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 10.02.2012

Version number 1

Revision: 10.02.2012

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

- **Date of issue:** 02.04.2001
- **Product identifier**
- **Trade name:** Solufloc
- **CAS Number:**  
16828-11-8
- **EC number:**  
233-135-0
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation:** Chemicals for various applications
- **Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**  
Melspring International B.V. Phone: +31 (0) 26 - 38420 - 00  
Arnhemsestraatweg 8 Fax: +31 (0) 26 - 38420 - 11  
NL-6881 NG Velp
- **E-mail address of the competent person responsible for the Safety Data Sheet:** [sdb@csb-online.de](mailto:sdb@csb-online.de)
- **Informing department:** Sales / Technics
- **Emergency telephone number:**  
National (Dutch) Toxic Information Center  
Phone: ++31-302748888  
As above or next toxicological information centre

### 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
- 
GHS05 corrosion
- Eye Dam. 1 H318 Causes serious eye damage.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
- 
Xi; Irritant
- R41: Risk of serious damage to eyes.
- **Information concerning particular hazards for human and environment:** void
- **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:**  
Aluminiumsulfat-16-hydrat
- **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.   |
| P103 | Read label before use.   |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

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

P309+P311 **IF exposed or if you feel unwell:** Call a POISON CENTER or doctor/physician.

P401 Store in accordance with local/regional/national/international regulations.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Designation:**  
16828-11-8 Aluminiumsulfat-16-hydrat
- **Identification number(s):**
- **EC number:** 233-135-0

### 4 First aid measures

- **Description of first aid measures**
- **General information:** Remove contaminated clothing.
- **After inhalation:** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact:**  
Wash with soap and water.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Use eye protection.  
Call a doctor immediately.
- **After swallowing:**  
Do not induce vomiting!  
Rinse out mouth and then drink plenty of water.  
In case of persistent symptoms consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**  
Carbon dioxide (CO<sub>2</sub>), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **Special hazards arising from the substance or mixture**  
Can be released in case of fire:  
Sulphur oxides (SO<sub>x</sub>)  
Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.

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- **Additional information**
- Cool endangered containers with water spray jet.
- Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
- Wear protective clothing and keep away unprotected persons.
- Avoid contact with skin and eyes.
- Do not breathe dust.
- Remove all ignition sources.
- Ensure adequate ventilation.
- **Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **Methods and material for containment and cleaning up:**
- Ensure adequate ventilation.
- Collect mechanically.
- Dispose of the material collected according to regulations.
- **Reference to other sections**
- See Section 8 for information on personal protection equipment.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling**
- Ensure good ventilation/exhaustion at the workplace.
- Do not breathe dust.
- Make sure that all applicable workplace limits are observed.
- Avoid long or repeated skin contact.
- Avoid contact with eyes.
- No special measures required.
- **Information about protection against explosions and fires:** The product is not flammable.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
- Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:**
- Store away from foodstuffs.
- Store away from oxidizers.
- **Further information about storage conditions:**
- Store under dry conditions.
- Store in cool, dry conditions in well sealed containers.
- Store in a locked cabinet or with access restricted to specifically instructed persons.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with critical values that require monitoring at the workplace:**
- Observe all workplace limits for dust.
- **Additional information:** The lists that were valid during the compilation were used as basis.

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- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and food.  
Do not eat, drink or smoke while working.  
Avoid contact with eyes.  
Avoid close or long term contact with the skin.  
Use skin protection cream for preventive skin protection.  
Wash hands during breaks and at the end of the work.
- **Breathing equipment:**  
If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.  
Use breathing protection in case of dust formation.
- **Protection of hands:**  
Protective gloves  
Check the permeability prior to each renewed use of the glove.  
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.
- **Eye protection:** Tightly sealed safety glasses
- **Body protection:**  
Protective work clothing  
Protective clothing should be selected specifically for the working place.

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Powder
Colour:	white
Smell:	odourless
- **pH-value (100 g/l) at 20°C:** ~4
- **Change in condition**

Melting point/Melting range:	86 (Zers.)°C
Boiling point/Boiling range:	not determined
- **Flash point:** not applicable
- **Inflammability (solid, gaseous)** Product is not inflammable.
- **Danger of explosion:** Product is not explosive.
- **Density at 20°C:** 1.69 g/cm<sup>3</sup>
- **Solubility in / Miscibility with**

Water at 20°C:	300 g/l
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- **Other information** No further relevant information available.

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### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Strong acids
- **Hazardous decomposition products:**  
Sulphur oxides (SO<sub>x</sub>)  
Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

16828-11-8 Aluminiumsulfat-16-hydrat

Oral	LD50	< 5000 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Longer lasting and/or repeated skin contact may cause irritation.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effect known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:  
Irritant

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** no data available
- **Persistence and degradability** No further relevant information available.
- **Degree of elimination:** no data available
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** no data available
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
There are no quantitative data on the ecological effects of this product available to us.  
Do not allow product to reach ground water, water bodies or sewage system.  
Water hazard class 1 (Assessment by list): slightly hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Disposal must be made according to official regulations.
- **Waste disposal key number:** According to local/national regulations.

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- **European waste catalogue:**  
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- |   |  |
|---|--|
| · <b>UN-Number</b><br>· <b>ADR, IMDG, IATA</b>                                    | Void   |
| · <b>UN proper shipping name</b><br>· <b>ADR, IMDG, IATA</b>                      | Void   |
| · <b>Transport hazard class(es)</b><br>· <b>ADR, IMDG, IATA</b><br>· <b>Class</b> | Void   |
| · <b>Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                | Void   |
| · <b>Special precautions for user</b>   | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>  | Not applicable.                                      |
| · <b>Transport/Additional information:</b>  | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>   | -  |

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **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:**  
*Aluminiumsulfat-16-hydrat*
- **Hazard statements**  
*H318 Causes serious eye damage.*
- **Precautionary statements**

<i>P101</i>	<i>If medical advice is needed, have product container or label at hand.</i>
<i>P102</i>	<i>Keep out of reach of children.</i>
<i>P103</i>	<i>Read label before use.</i>
<i>P280</i>	<i>Wear protective gloves/protective clothing/eye protection/face protection.</i>
<i>P305+P351+P338</i>	<i>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</i>
<i>P309+P311</i>	<i>IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.</i>
<i>P401</i>	<i>Store in accordance with local/regional/national/international regulations.</i>
<i>P501</i>	<i>Dispose of contents/container in accordance with local/regional/national/international regulations.</i>

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- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **Decree to be applied in case of technical fault:** Directive 96/82/EC does not apply.
- **Water hazard class:**  
Water hazard class 1 (Assessment by list): slightly hazardous for water  
ID-Number: 486
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

*These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Reasons for changes:**  
The Material Safety Data Sheet has been revised. Changes in the respective chapters are characterized in the left side edge by \*.  
Changes in classification and labelling
- **Department issuing MSDS:**  
C.S.B. GmbH                      Phone: +49 - 2151 - 652086-0  
Parkstraße 29                      Fax: +49 - 2151 - 652086-9  
D-47829 Krefeld  
Germany
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
GHS: Globally Harmonized 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
- **\* Data compared to the previous version altered.**

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