

# SAFETY DATA SHEET

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

#### 1.1. Product identifier

#### **Trade name**

Flockningsmedel

Product no.

### **REACH registration number**

Not applicable

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

#### Relevant identified uses of the substance or mixture

flocculant

#### **Uses advised against**

The full text of any mentioned and identified use categories are given in section 16

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

### **Company and address**

Blue & Green AB Stenorsvägen 52

261 44 Landskrona

Sweden

Tfn: +46 418 399000 Fax: +46 418 13199 www.blueandgreen.se

#### E-mail

info@blueandgreen.se

### **SDS** date

2020-11-16

#### **SDS Version**

1.0

### 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

#### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318

See full text of H-phrases in section 2.2.

### 2.2. Label elements

### **Hazard pictogram(s)**



### Signal word

Danger

#### Hazard statement(s)

May be corrosive to metals. (H290)

Causes severe skin burns and eye damage. (H314)



### **Precautionary statements**

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

Keep out of reach of children. (P102).

Prevention Do not breathe mist/vapours/fume/spray. (P260).

Response IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower]. (P303+P361+P353).

Storage Store locked up. (P405).

Disposal Dispose of contents/container to an approved waste disposal plant. (P501).

### Identity of the substances primarily responsible for the major health hazards

Aluminum chloride, Additional labelling

Not applicable
Unique formula identifier (UFI)

E9CU-3KF1-5006-NF8P

#### 2.3. Other hazards

Not applicable

#### **Additional warnings**

Tactile warning. If this product is sold in retail, it must be delivered with child-resistant fastening.

### VOC (volatile organic compound)

Not applicable

#### SECTION 3: Composition/information on ingredients

### 3.1/3.2. Substances/Mixtures

NAME: Aluminum chloride,

IDENTIFICATION NOS.: CAS-no: 1327-41-9 EC-no: 215-477-2 REACH-no: 01-2119531563-43

CONTENT: 15 - <25%

CLP CLASSIFICATION: Met. Corr. 1, Eye Dam. 1

H290, H318

(\*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 4 - 6

Detergent:

#### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### **General information**

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### **Inhalation**

Bring the person into fresh air and stay with him/her.

#### Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water.

### Eye contact

Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing.

### Ingestion

In the case of ingestion, contact a doctor immediately and bring the safety data sheet or label. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

#### Burns



Not applicable

### 4.2. Most important symptoms and effects, both acute and delayed

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### 4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get immediate medical advice/attention.

#### Information to medics

Bring this safety data sheet.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist.

#### 5.2. Special hazards arising from the substance or mixture

Nothing special

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

#### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

### 6.2. Environmental precautions

No specific requirements.

### 6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

#### 6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

#### SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

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

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### Storage temperature

No data available.

#### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

OEL

No substances are listed in The Control of Substances Hazardous to Health Regulations with an occupational exposure limit. **DNEL / PNEC** 

DNEL (Aluminum chloride,): 0.5 mg/kg bw/d

Exposure: Oral

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (Aluminum chloride,): 16.4 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (Aluminum chloride,): 4.6 mg/kg

Exposure: Dermal



Duration of Exposure: Long term - Systemic effects - Workers

DNEL (Aluminum chloride,): 2.3 mg/kg bw/d

Exposure: Oral

Duration of Exposure: Long term - Systemic effects - General population

DNEL (Aluminum chloride,): 2.32 mg/kg bw/d

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - General population

DNEL (Aluminum chloride,): 4.0 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - General population

#### 8.2. Exposure controls

Control is unnecessary if the product is used as intended.

#### **General recommendations**

Observe general occupational hygiene standards.

#### **Exposure scenarios**

There is no appendix to this safety data sheet.

#### **Exposure limits**

Occupational exposure limits have not been defined for the substances in this product.

#### **Appropriate technical measures**

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

#### **Hygiene measures**

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

### Measures to avoid environmental exposure

Keep containment materials near the workplace. If possible, collect spillage during work.

#### Individual protection measures, such as personal protective equipment



#### Generally

Use only CE marked protective equipment.

#### **Respiratory Equipment**

No specific requirements.

#### Skin protection

Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.

#### **Hand protection**

Nitrile rubber

Can be reused after cleaning

### **Eye protection**

Wear safety glasses with side shields.

### **SECTION 9: Physical and chemical properties**

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

Form Liquid
Colour Colourless
Odour None

Odour threshold (ppm) No data available.

pH <2

Viscosity (40°C) No data available.

Density (g/cm³) 1.1

Phase changes

Melting point (°C) -10

Boiling point (°C)

Vapour pressure

No data available.

No data available.

No data available.

No data available.



Evaporation rate (n-butylacetate = 100)

No data available.

Data on fire and explosion hazards

Flash point (°C)

Ignition (°C)

Auto flammability (°C)

Explosion limits (% v/v)

Explosive properties

No data available.

No data available.

No data available.

No data available.

Solubility

Solubility in water Soluble

n-octanol/water coefficient No data available.

9.2. Other information

Solubility in fat (g/L) No data available.

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No data available

#### 10.2. Chemical stability

The product is stable under the conditions, noted in the section "Handling and storage".

#### 10.3. Possibility of hazardous reactions

Nothing special

#### 10.4. Conditions to avoid

Nothing special

#### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

#### Acute toxicity

Substance: Aluminum chloride,

Species: Rat Test: LD50

Route of exposure: Dermal Result: >5000 mg/kg

Substance: Aluminum chloride,

Species: Rabbit Test: LD50

Route of exposure: Dermal Result: >2000 mg/kg

Substance: Aluminum chloride,

Species: Rat Test: LD50

Route of exposure: Oral Result: >2000 mg/kg

Substance: Aluminum chloride,

Species: Rat Test: LC50

Route of exposure: Inhalation

Result: >5 mg/l

### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

Causes serious eye damage.

#### Respiratory or skin sensitisation

No data available.

### Germ cell mutagenicity

No data available.

#### Carcinogenicity

No data available.

#### Reproductive toxicity

No data available.



#### STOT-single exposure

No data available.

#### **STOT-repeated exposure**

No data available.

#### **Aspiration hazard**

No data available.

#### Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Substance: Aluminum chloride,

Species: Daphnia Test: EC50 Duration: 48h Result: 98 mg/l

Substance: Aluminum chloride,

Species: Daphnia Test: LC50 Duration: 48h

Result: >0.15 mg/l (as AL3+)

Substance: Aluminum chloride,

Species: Fish Test: LC50 Duration: 96h Result: 186 mg/l

Substance: Aluminum chloride,

Species: Fish Test: LC50 Duration: 96h

Result: >0.156 mg/l (as AL3+)

Substance: Aluminum chloride,

Species: Algae Test: EC50 Duration: 72h Result: 1319 mg/l

#### 12.2. Persistence and degradability

Substance Biodegradability Test Result

No data available.

### 12.3. Bioaccumulative potential

Substance Potential bioaccumulation LogPow BCF

Aluminum chloride, No 3 No data available

#### 12.4. Mobility in soil

Aluminum chloride,: Log Koc= 2.4541, Calculated from LogPow (Moderate mobility potential.).

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

### 12.6. Other adverse effects

Nothing special

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

### Waste

**EWC** code

## Specific labelling

Not applicable

#### Contaminated packing

Contaminated packaging must be disposed of similarly to the product.



### **SECTION 14: Transport information**

#### 14.1 - 14.4

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

14.1. UN number

14.2. UN proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

14.3. Transport hazard

8 class(es) Ш 14.4. Packing group

**Tunnel restriction code** F

IMDG

UN-no. 3264

**Proper Shipping Name** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Class PG\* Ш F-A, S-B **EmS** MP\*\* **Hazardous constituent** 

IATA/ICAO

UN-no. 3264

**Proper Shipping Name** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Class Ш

#### 14.5. Environmental hazards

### 14.6. Special precautions for user

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available (\*) Packing group (\*\*) Marine pollutant

### **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **Restrictions for application**

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

### **Demands for specific education**

#### **Additional information**

Not applicable

#### Seveso

#### Biocidal reg. no.

Not applicable

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

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 (CLP).

Regulation (EC) 1907/2006 (REACH).

#### 15.2. Chemical safety assessment

No

### **SECTION 16: Other information**

#### Full text of H-phrases as mentioned in section 3

H290 - May be corrosive to metals.



H318 - Causes serious eye damage.

The full text of identified uses as mentioned in section 1

#### **Additional label elements**

Not applicable

#### **Other**

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the mixture in regard of skin corrosion and serious eye damage is based on the pH-criterion given by Regulation (EC) No. 1272/2008 (CLP)It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

David Löwenstein

Date of last essential change (First cipher in SDS version)

Date of last minor change (Last cipher in SDS version)

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