

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

1.1. Product identifier

Trade name	Marisol BC+
Article No.	24-4543
UFI code	T3K3-9029-J00S-KWS7

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

Product type	Flocculant Coagulant
Relevant identified uses	Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

Supplier	AB DFS
Street address	Fiskebäcks Hamn 7 426 58 Västra Frölunda Sweden
Telephone	031-29 14 35
Email	order@dfs-ab.se
Web site	www.dfs-ab.se

1.4. Emergency telephone number

Emergency phone number	112
Available outside office hours	Yes

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification	Corrosive to metals, hazard category 1 Serious eye damage, hazard category 1
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Hazard statements	H290, H318
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2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word	Danger
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Hazard statements	H290 May be corrosive to metals. H318 Causes serious eye damage.
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Precautionary statements

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.
P280 Wear eye protection.

More information

Contains: Aluminum chlorine hydroxide

2.3. Other hazards

Other hazards

This mixture does not contain any REACH registered substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Aluminum chloride, basic	1327-41-9 215-477-2 01-2119531563-43 -	35 - 45%	Met. Corr. 1, Eye Dam. 1	H290, H318 - -	-

Substance additional information

Section 16 for the full text of H-phrases mentioned in this section. For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Description of first aid measures

In uncertainty or when symptoms persist, seek medical attention.

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water. If symptoms persist, call a physician.

Eye contact

Rinse immediately with plenty of running water for 10 minutes. Remove any contact lenses. If symptoms persist, call a physician.

Ingestion

Rinse mouth out with water. Contact your doctor/poison information center. Do NOT induce vomiting. Drink 1 or 2 glasses of water or milk.

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

Most important symptoms and effects, both acute and delayed

Contact with eyes may cause serious smarting / irritation and burns. Risk of serious damage to eyes. Ingestion may cause smarting in the mouth and throat, nausea and vomiting. Irritating to skin. Repeated exposure may cause skin dryness or cracking.

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

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media Do not use a direct jet of water.

5.2. Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture Hazardous decomposition products formed under fire conditions. Hydrogen chloride gas.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Containers in the vicinity of fire should be moved immediately or cooled with water. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face mask. Firefighter equipment (eg helmet, safety boots and gloves) that complies with the European standard EN 469, provides basic protection in the event of chemical accidents.

Measures in case of fire Immediately isolate the area by dismissing people in the vicinity of the fire.

Other

Other The product is not flammable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions, protective equipment and emergency procedures Ensure good ventilation. Wear suitable protective equipment. Avoid inhalation and contact with the skin and eyes. Prevent further leakage or spillage if safe to do so.

6.2. Environmental precautions

Environmental precautions Prevent entry to sewers and public waters. Notify the responsible authority in the event of contamination of soil or water, or discharges into sewage systems.

6.3. Methods and material for containment and cleaning up

Methods and material for containment and cleaning up Small amounts can be dried up and the surface can then be rinsed off with water. Major spillage should be banked with sand, earth or similar material and collected into suitable enclosed containers for further destruction.

6.4. Reference to other sections

Reference to other sections Personal protection see section 8 and for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions Ensure good ventilation. Avoid the inhalation of fumes as well as contact with skin and eyes. Wear personal protective equipment.

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General hygiene

Emergency shower and eyewash shall be available at the work site. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using the product. Splashed clothes are removed and washed before being used again.

7.2. Conditions for safe storage, including any incompatibilities

Conditions for safe storage, including any incompatibilities

Store at temperatures between 5 °C and 30 °C. Store in the original package. Keep away from food, feed, fertilizer and similar substances.
Do not store with the following: strong bases Hypochlorites.

7.3. Specific end use(s)

Specific end use(s)

Identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

8.2. Exposure controls

Appropriate engineering controls

Eye shower should be available. Avoid contact with the skin and the eyes.

Eye / face protection

Wear approved protective goggles or a face visor.

Hand protection

Use protective gloves. The gloves must conform to the standard EN 374.
Wear gloves in a suitable material such as PVC, neoprene or natural rubber.

Other skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Combination filter: B-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Yellowish

Odour

slight

Melting point / freezing point

No information available

Boiling point or initial boiling point and boiling range

100 - 120 °C

Flammability

The product is not flammable.

Lower and upper explosion limit

No information available

Flash point

No data available

Auto-ignition temperature

No information available

Decomposition temperature

>200 °C

pH

Approx. 1.5 (concentrate)

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Kinematic viscosity No information available

Solubility Water-soluble

Partition coefficient n-octanol/water No information available

Vapour pressure No information available

Density and/or relative density 1300 - 1330 kg/m³

Relative vapour density No information available

Particle characteristics Not relevant.

9.2. Other information

Other information No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under normal usage and storage conditions.

10.2. Chemical stability

Chemical stability Stable under normal usage and storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Reacts during heat development with the following: bases

10.4. Conditions to avoid

Conditions to avoid Avoid temperatures above Approx. 200°C

10.5. Incompatible materials

Incompatible materials Avoid contact with chlorites, hypochlorites, sulfites, galvanized surfaces, iron, strong bases

10.6. Hazardous decomposition products

Hazardous decomposition products At heating or fire, hydrogen chloride and other toxic gases may be formed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals
Aluminum chloride, basic 1327-41-9 / 215-477-2	LD50	>2000 mg/kg	Oral	-	rat

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Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals
Aluminum chloride, basic 1327-41-9 / 215-477-2	LD50	>5,0 mg/l	Inhalation	4 h	rat
Aluminum chloride, basic 1327-41-9 / 215-477-2	LD50	>2000 mg/kg	Dermal	-	rat

Skin corrosion/irritation

In case of prolonged contact, the product may dry out the skin. Based on the available data, the classification criteria are not met.

Serious eye damage/irritation

May cause severe irritation / burning and burns. Risk of serious damage to eyes.

Germ cell mutagenicity

Based on the available data, the classification criteria are not met.

Carcinogenicity

Based on the available data, the classification criteria are not met.

Reproductive toxicity

Based on the available data, the classification criteria are not met.

STOT-single exposure

Based on the available data, the classification criteria are not met.

STOT-repeated exposure

Based on the available data, the classification criteria are not met.

Aspiration hazard

Based on the available data, the classification criteria are not met.

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

The product is not classified as environmentally harmful.

Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline
Aluminum chloride, basic 1327-41-9 / 215-477-2	NOEC	>1000 mg/l	96 h	(Danio rerio).	OECD Test Guideline 203

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline
Aluminum chloride, basic 1327-41-9 / 215-477-2	EC50	0,24 mg/l	72 h	Pseudokirchneriella subcapitata (green algae).	OECD Test Guideline 201
Aluminum chloride, basic 1327-41-9 / 215-477-2	NOEC	<0,02 mg/l	72 h	Pseudokirchneriella subcapitata (green algae).	OECD Test Guideline 201

Acute crustacean toxicity

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Product / Substance name CAS / EC no.	Measurement type	Value / Result	Species	Method / Guideline
Aluminum chloride, basic 1327-41-9 / 215-477-2	EC50	98 mg/l	Daphnia magna (Water flea)	OECD Test Guideline 202

12.2. Persistence and degradability

Persistence and degradability The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility No information available

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment The substance/mixture does not contain any components that are considered persistent, bioaccumulative and toxic (PBT) or very persistent and highly bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties

Endocrine disrupting properties Discharges to water recipients can lower the pH, which entails a risk of damage to aquatic organisms.

12.7. Other adverse effects

Other adverse effects No other adverse effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations The product should be disposed of as hazardous waste. Dispose of any product, residue or packing material according to national and local regulations. Do not dispose of waste into sewer. Empty, cleaned packaging must be sorted for recycling.

Packaging Contaminated packaging must be disposed of as product.

Other

Waste code Depends on business area and use. Appropriate classification of waste is the user's responsibility.

SECTION 14: Transport information

14.1. UN number

UN number 3264

14.2. UN proper shipping name

CORROSIVE ACIDIC INORGANIC LIQUID, N.O.S. (Aluminum chlorine hydroxide)

IMDG proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium chloride hydroxide)

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14.3. Transport hazard class(es)

Label	8
ADR / RID Class	8
ADR / RID hazard identification number	80
IMDG Class	1-Acids

14.4. Packing group

Packing group III

14.5. Environmental hazards

Environmental hazards The product is not classified as environmentally hazardous.

IMDG Marine Pollutant No

14.6. Special precautions for user

Special precautions for user IMDG EmS

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU regulations Regulation (EC) No 1907/2006 of the European Parliament and of the Council, (REACH).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council.
ADR 2021: Agreement concerning the International Carriage of Dangerous Goods by Road, ECE/TRANS/300.
The International Maritime Dangerous Goods (IMDG) Code, 2020 Edition.

National regulations Local laws and regulations should be carefully observed.

15.2. Chemical safety assessment

Chemical safety assessment A chemical safety assessment has been performed for: Aluminum chlorine hydroxide

SECTION 16: Other information

Changes to previous revision 1

Abbreviations PBT: Persistent, Bioaccumulative and Toxic.
vPvB: very Persistent and very Bioaccumulative.
LD50: Lethal dose, the dose that kills 50% of a population.
LC50: Lethal concentration for 50% of a test population.
DNEL: Derived level without observed effects.
PNEC: Presumed concentration without observed effects.
NOEC: No Observed Effect Concentration

References to key literature and data sources <http://echa.europa.eu>
<http://eur-lex.europa.eu>
C&L Inventory

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Evaluation methods for classification

The classification is based on the addition method according to Regulation (EC) No 1272/2008 (CLP).

Phrase meaning

Met. Corr. 1 - Corrosive to metals, hazard category 1
Eye Dam. 1 - Serious eye damage, hazard category 1
H290 May be corrosive to metals.
H318 Causes serious eye damage.