

SAFETY DATA SHEET

(according to Regulation (EC) No 1907/2006 and to Regulation (EU) No 2020/878)

Date of issue / version no.: Revision: 6 Apr 2023 / 2.0

Supersedes version of: 27 March 2017 / 1.0

Product name: **AZURO FLOKUL**

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

1.1. Product identifier

Product identifier: **AZURO FLOKUL**
Other names, synonyms: Liquid aluminium sulphate
Aluminium sulphate
Registration number REACH: 01-2119531538-36

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

Identified uses: Swimming pool chemical – preparation for clearing pool water.
Intended for sale to the consumer.

Unadvisable uses: None known.

1.3. Details of the supplier of the safety data sheet

Name of supplier: **Mountfield a.s.**
Registered office/place of business: Mirošovická 697, 251 64 Mnichovice, CZ
Telephone number: +420 255 704 261
Fax: +420 255 704 263
www: www.mountfield.cz
e-mail address of competent person responsible for the safety data sheet: info@infobl.cz

1.4. Emergency telephone number

112 (24 hour service) – applicable to EU countries only.
Czech Republic: +420 – 224 91 92 93; 224 91 54 02 (24hour service)
Klinika nemocí z povolání – Toxikologické informační středisko, Na Bojišti 1, 128 08 Praha 2, CZ

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Met. Corr. 1; H290

Eye Dam. 1; H318

The substance is classified as hazardous within the meaning of Regulation (EC) No 1272/2008

The most important adverse physical, human health and environmental effects

May be corrosive to metals. Corrodes metal – aluminium.


Causes serious eye damage. Aqueous solutions with concentration above 20% have corrosive effects.

If the instructions for use are observed, the product has no hazardous effects on the environment.

The full texts of all classifications and hazard statements are given in Section 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Product identifier:	AZURO FLOKUL Aluminium sulphate
Identification number:	CAS number: 10043-01-3
Hazard pictogram:	
Signal word:	Danger
Hazard statements:	H290 May be corrosive to metals. 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.

SAFETY DATA SHEET

(according to Regulation (EC) No 1907/2006 and to Regulation (EU) No 2020/878)

Date of issue / version no.: Revision: 6 Apr 2023 / 2.0

Supersedes version of: 27 March 2017 / 1.0

Product name: **AZURO FLOKUL**

Supplemental information on the label:

P234 Keep only in original container.
P280 Wear protective gloves/eye protection.

Note: In order to avoid duplicity of texts, P statements describing first aid and storage and disposal of the product have been omitted since they are part of the complete text on the product label.

2.3. Other hazards

The substance does not meet the criteria for PBT, vPvB, SVHC or endocrine disruptors classification.

When diluted, the product hydrolyses, aluminium solubility depends on pH which decreases due to hydrolysis.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product identifier	Concentration (% weight)	Index No. CAS No. EC No.	Classification according to Regulation (EC) No 1272/2008
Aluminium sulphate (REACH No. 01-2119531538-36)	50%	- 10043-01-3 233-135-0	Met. Corr. 1; H290 Eye Dam. 1; H318
Water	remainder	- 7732-18-5 231-791-2	Substance not classified as hazardous

*Classification of 100% powder aluminium sulphate hydrate: Eye Dam.1, H318.

However, the product (liquid aluminium sulphate) is not manufactured by dissolving a solid product. Therefore, the resulting classification of the product corresponds to registration data (Dossier).

3.2. Mixtures

The product is a substance.

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

Remove the affected person from the contaminated area, place him in a resting position, make breathing easier by loosening his clothing and, if necessary, monitor his vital functions. If symptoms of acute health damages occur (difficult breathing, persistent cough, chest pains, nausea, worsened sensory perception, faintness, etc.), call medical help or transport the affected person to a doctor.

Inhalation:

Take the affected person to fresh air, rinse his eyes, mouth and nose with lukewarm water.

Skin contact:

Remove carefully (by rinsing) remains of the product from unprotected skin and wash it thoroughly with soap and plenty of running water.

Eye contact:

Remove contact lenses, if worn, and start rinsing the affected eye with water as soon as possible. Force eyelids to open, if necessary. Avoid contaminating the affected eye with contaminated rinsing liquid. Rinse continually for at least 10 minutes! Never neutralise! Seek medical help.

Ingestion:

Calm the affected person down, rinse his mouth with water and give him 0.2-0.4 dl cold water to drink. Do not induce vomiting. If spontaneous vomiting occurs, prevent vomit aspiration. Do not give activated carbon. Call medical help immediately or transport the affected person to a doctor.

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

Inhalation:

The product (solution) is practically not hazardous.

Skin contact:

The product causes skin irritation (reddening).

Eye contact:

Causes serious eye damage.

Ingestion:

Ingestion may cause irritation or even acid burning of the intestinal tract.

SAFETY DATA SHEET

(according to Regulation (EC) No 1907/2006 and to Regulation (EU) No 2020/878)

Date of issue / version no.: Revision: 6 Apr 2023 / 2.0

Supersedes version of: 27 March 2017 / 1.0

Product name: **AZURO FLOKUL**

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

Workplace must be equipped with running water and soap. Specific antidotes – none known. In case of eye contact call medical help immediately.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: The product is non-flammable. Use extinguishing media suitable for the surrounding conditions.

Unsuitable extinguishing media: None given.

5.2. Special hazards arising from the substance or mixture

Sulphur trioxide and sulphur dioxide generated at temperatures above the decomposition point – approx. 650 °C.

5.3. Advice for firefighters

Self-contained breathing apparatus (EN 137), protective clothing. Prevent extinguishing media used from entering the sewerage and water sources.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Take personnel not participating in removing consequences of an accident away from the area. Ventilate closed spaces. When removing consequences of an accident, use prescribed protective equipment: self-contained breathing apparatus in combination with complete chemical clothing. No smoking and handling naked flame.

6.2. Environmental precautions

Prevent from entering soil, the sewerage, surface waters and ground waters.

6.3. Methods and material for containment and cleaning up

Absorb with an inert material. May be neutralised with lime. Clean the affected area thoroughly with water. Small release should be diluted with plenty of water.

6.4. Reference to other sections

Observe also provisions given in Sections 8 and 13 of this Safety Data Sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Instructions for safe handling:

Observe the basic requirements for safe work. Use recommended personal protective equipment. Prevent contact with eyes. Eating, drinking and smoking is prohibited when the product is handled. Ventilation must be provided in closed spaces, either natural or forced. The workplace must be kept clean, escape routes must be kept free. Risk of slipping on spilt product!

Measures to protect the environment:

Perform suitable measures for collecting releases from containers, depending on the amount of product stored. Collect damaged packaging mechanically and dispose of, if safe to do so. Prevent spills and releases into the sewerage, surface and ground waters and soil. If a release occurs, proceed according to Section 6.

7.2. Conditions for safe storage, including any incompatibilities

Store in original, tightly closed containers, in a dry, cool place. Store packaging separately from foods. Store separately from oxidising agents.

7.3. Specific end use(s)

Specific use is given in the instructions for use on the product packaging label or in the product documentation.

SAFETY DATA SHEET

(according to Regulation (EC) No 1907/2006 and to Regulation (EU) No 2020/878)

Date of issue / version no.: Revision: 6 Apr 2023 / 2.0

Supersedes version of: 27 March 2017 / 1.0

Product name: **AZURO FLOKUL**

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values according to Directive 2000/39/EC, as amended – are not specified

Limit values of biological exposure tests indicators are not specified in Directive no. 98/24/EC, as amended.

DNEL values:

Workers: 13.4 mg/m³ mg/m³ – human exposure, inhalatory, long-term exposure, systemic effects

Workers: 3.8 mg/kg body weight/day – human exposure, dermal, long-term exposure, systemic effects

General population: 3.3 mg/m³ – human exposure, inhalatory, long-term exposure, systemic effects

General population: 1.9mg/kg body weight/day – human exposure, dermal, long-term exposure, systemic effects

General population: 1.9 mg/kg body weight/day – human exposure, oral, long-term exposure, systemic effects

PNEC values: no hazard identified

8.2. Exposure controls

8.2.1. Appropriate engineering controls

The workplace shall be equipped with local extraction and a source of running water for rinsing eyes, washing hands or contaminated skin. Tightly closed devices and packaging, natural and forced ventilation. Avoid eye contact, ingestion, inhalation and skin contact. No eating, drinking and smoking at work. Prevent contact of the product with foods and beverages. Wash hands with soap and water after work. Immediately remove clothing contaminated with the product.

8.2.2. Individual protection measures, such as personal protective equipment

Regulation (EU) No 2016/425 introduce all personal protective equipment used.

<i>Eye/face protection:</i>	Protective goggles (EN 166).
<i>Skin protection:</i>	<i>Hand protection:</i> Protective gloves (EN 374-1). Suitable: viton (R), material thickness 0.7 mm, penetration time > 480 minutes; natural latex, material thickness 0.6 mm, penetration time > 120 minutes. It is necessary to find out with the manufacturer and to observe exact times of penetration through the glove materials. <i>Other skin protection:</i> Work clothing.
<i>Respiratory protection:</i>	Not necessary for normal handling
<i>Thermal hazards:</i>	None.

8.2.3. Environmental exposure controls

See Directives 80/68/EEC, 90/656/EEC, 91/692/EEC, on waters, and Directive 96/62/EEC, on air

Secure the area against releases into water courses, soil and the sewerage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Clear colourless
Odour	Slight, non-characteristic
Melting point/freezing point	-15 °C
Boiling point or initial boiling point and boiling range	Not given
Flammability	Not given
Lower and upper explosion limit	Not relevant
Flash point	Non-flammable
Auto-ignition temperature	Not relevant
Decomposition temperature	Approx. 650 °C
pH	Approx. 2–2.3 (50% solution, at 20 °C)
Kinematic viscosity	Not given

SAFETY DATA SHEET

(according to Regulation (EC) No 1907/2006 and to Regulation (EU) No 2020/878)

Date of issue / version no.: Revision: 6 Apr 2023 / 2.0

Supersedes version of: 27 March 2017 / 1.0

Product name: **AZURO FLOKUL**

Solubility	Highly soluble in water, approx. 500 g/l (at 20 °C) Solubility in non-polar solvents – no
Partition coefficient n-octanol/water (log value)	Not given
Vapour pressure	Not given
Density and/or relative density	Approx. 1.3 g/cm ³ (at 20 °C)
Relative vapour density	Not given
Particle characteristics	Not relevant

9.2. Other information

Data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under normal conditions.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Strong oxidising agents.

10.4. Conditions to avoid

High temperature.

10.5. Incompatible materials

Non-alloy steel, galvanised surfaces, aluminium.

10.6. Hazardous decomposition products

Sulphur trioxide and sulphur dioxide generated at temperatures above the decomposition point – approx. 650 °C.

SECTION 11: Toxicological information

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

Acute toxicity

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

- LD ₅₀ , oral, rat (mg.kg ⁻¹):	2,000
- LD ₅₀ , dermal, rabbit (mg.kg ⁻¹):	1,167.5
- LC ₅₀ , inhalation, rat (mg.l ⁻¹):	50

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.

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.

SAFETY DATA SHEET

(according to Regulation (EC) No 1907/2006 and to Regulation (EU) No 2020/878)

Date of issue / version no.: Revision: 6 Apr 2023 / 2.0

Supersedes version of: 27 March 2017 / 1.0

Product name: **AZURO FLOKUL**

11.2. Information on other hazards

Endocrine disrupting properties

The substance does not have endocrine disrupting properties according to REACH Article 57(f) or Commission Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information

Long-term or frequently repeated exposure may lead to irritation of skin and eyes. Prolonged direct contact may cause defatting and subsequent irritation of skin.

SECTION 12: Ecological information

12.1. Toxicity

The product is not classified as hazardous for the environment.

Water hazard class (WGK) = 1, low hazard to waters

In concentrations common in nature and with approximately neutral pH, aluminium slats have no harmful effects on fish.

- NOEC, 15 days, fish (mg.l ⁻¹):	1.67
- NOEC, 28 days, crustacea (mg.l ⁻¹):	12
- EC ₅₀ , algae (mg.l ⁻¹):	3.011 freshwater algae 302 seaweed
- EC ₅₀ , bacteria (mg.l ⁻¹):	3.011

12.2. Persistence and degradability

Inorganic substance. The product hydrolyses.

12.3. Bioaccumulative potential

Not expected.

12.4. Mobility in soil

Not determined, the product is highly soluble in water.

12.5. Results of PBT and vPvB assessment

The substance does not meet the criteria for PBT or vPvB classification.

12.6. Endocrine disrupting properties

The substance does not have endocrine disrupting properties according to REACH Article 57(f) or Commission Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

The product is of an inorganic nature, used for cleaning and treatment of pool water. It hydrolyses in water (in pH range 5–7) with the formation of aluminium hydroxides. Due to this reaction, pH in water decreases. In the presence of phosphates, aluminium-phosphate complexes may be formed.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommended disposal method for legal persons and natural persons authorised to conduct a business:

May not be disposed of together with municipal waste. Do not discharge into the sewerage. Place unused product and contaminated packaging into labelled waste collection containers and hand marked waste over for disposal to a specialised company authorised to do so.

Recommended disposal method of the product and packaging: recycle the product, if possible. Contaminated clothing must be cleaned prior to recycling. Consider incineration or landfilling only when recycling is not possible.

Catalogue numbers of waste types (European Waste Catalogue) are to be assigned by the user upon the product application used and other facts.

European Waste Catalogue (EWC): 06 03 14

Contaminated packaging: 15 01 10

Waste from cleaning: 15 02 02

SAFETY DATA SHEET

(according to Regulation (EC) No 1907/2006 and to Regulation (EU) No 2020/878)

Date of issue / version no.: Revision: 6 Apr 2023 / 2.0

Supersedes version of: 27 March 2017 / 1.0

Product name: **AZURO FLOKUL**

Recommended disposal method for consumers:

Hand over unused product or empty packaging containing remains of the product to a hazardous waste collection place! Empty contaminated packaging thoroughly, rinse with water several times and then place into municipal waste collection containers.

Legal regulations relating to waste

Directive on waste 2006/12/EC and 2008/98/EC. Regulation (EU) No 1357/2014 on waste.

Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1. UN number or ID number	UN 3264
14.2. UN proper shipping name	ADR/RID: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium sulphate) IMDG, ICAO/IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium sulphate)
14.3. Transport hazard class(es)	8
14.4. Packing group	III
14.5. Environmental hazards	No
14.6. Special precautions for user	Not known
14.7. Maritime transport in bulk according to IMO instruments	Not known

SECTION 15: Regulatory information

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

Restrictions on the substances or mixtures according to Annex XVII of the REACH: point 3.

Candidate list (SVHC list of substances) – REACH article 59: none.

Substances subject to authorization (Annex XIV of the REACH Regulation): none.

Regulation (EC) of the European Parliament and of the Council No 1907/2006 on Registration, evaluation, authorisation and restriction of chemicals (REACH)

Regulation (EC) of the European Parliament and of the Council No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP)

The recipient of the substance or mixture must take measures following the legal status of the substance or mixture (including substances contained in the mixture) in compliance with domestic legislation of the particular member state, and to list those legal regulations here.

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

SECTION 16: Other information

Changes to the SDS

Date of issue of the manufacturer's SDS: 5 Jan 2023 / 5.0 (Czech version)

Revision history:

Version	Date	Changes
1.0	27 March 2017	First issue according to Regulation (EC) of the European Parliament and of the Council No 1907/2006 and to Regulation (EU) of the Commission No 830/2015
2.0	6 Apr 2023	Formal modifications to the form acc. to Commission Regulation (EU) No 2020/878

SAFETY DATA SHEET

(according to Regulation (EC) No 1907/2006 and to Regulation (EU) No 2020/878)

Date of issue / version no.: Revision: 6 Apr 2023 / 2.0

Supersedes version of: 27 March 2017 / 1.0

Product name: **AZURO FLOKUL**

Legend to abbreviations and acronyms

CAS	Chemical Abstract Service
EC	European Community number of a chemical for EINECS, ELINCS and NLP inventories
PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	Very Persistent and Very Bioaccumulative
PNEC	Predicted No Effect Concentration(s)
DNEL	Derived No Effect Level
LD ₅₀	Lethal Dose to 50% of a test population (Median Lethal Dose)
LC ₅₀	Lethal Concentration to 50% of a test population
EC ₅₀	Half maximal effective concentration
IC ₅₀	Half maximal inhibitory concentration
SVHC	Substances of Very High Concern
Met. Corr. 1	Corrosive to metals, Hazard Category 1
Eye Dam. 1	Serious eye damage, Hazard Category 1

Key literature references and sources for data

The information contained herein is based on our best knowledge and the present legislation. Further, the Safety Data Sheet has been elaborated on the basis of the original Safety Data Sheet provided by the manufacturer.

Methods used for classification

The classification of the substance has been assessed by the manufacturer and used by the supplier upon article 4, par. 5 of Regulation (EC) no. 1907/2006 (using classification derived by a supply chain participant).

List of relevant hazard statements and precautionary statements used in the SDS

H290 May be corrosive to metals.

H318 Causes serious eye damage.

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

P102 Keep out of reach of children.

P234 Keep only in original container.

P280 Wear protective gloves/eye protection.

Training advice

According to article 35 of Regulation (EC) of the European Parliament and of the Council no. 1907/2006, workers and their representatives shall be granted access by their employer to the information provided in the SDS in relation to the product that they use or may be exposed to in the course of their work.

The occupational safety at the workplace is governed by Directive 91/383/EEC.

Other information

For further information see Section 1.3.

This Safety data Sheet contains data for ensuring occupational safety and health protection and protection of the environment. The data provided correspond to the current state of knowledge and experience and comply with currently valid legal regulations. However, they may not be considered to be any guarantee of the product suitability and usability for particular applications.