

SUDFLOC 3870

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 10/23/2023

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Version: 1.4



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

1.1. Product identifier

Product form	: Substance
Trade name	: SUDFLOC 3870
Product code	: SUDFLOC 3870
Type of product	: Mixture
Product group	: Trade product

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

1.2.1. Relevant identified uses

Main use category	: Industrial use
Use of the substance/mixture	: Potable Water Coagulation : Maximum User Limit is 157 mg/L
Use of the substance/mixture	: Water treatment Waste water treatment

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ImproChem(Pty) Ltd T/A AECI Water
1 Wharhirst Road
Umbogintwini - South Africa
T +27(31) 949 8200

1.4. Emergency telephone number

Emergency number	: 0800 SPILLS or 0800 774557
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2 H319

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin and eye irritation. Corrosion tests were done using Polyaluminium Chloride and the Corrosion Rate was 3,08 mm/year which is less than then max of 6.25 mm/year, above which a product is classified as corrosive. Corrosion tests were done using Polydadmac and the Corrosion Rate was 1.68 mm/year which is less than then max of 6.25 mm/year, above which a product is classified as corrosive.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

:



GHS07

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H319 - Causes serious eye irritation.

Precautionary statements (CLP)

: P280 - Wear goggles, gloves, clothing and respiratory protection
P337+P313 - If eye irritation persists: Get medical advice/attention.
MUL is 157 mg/L

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Name : SUDFLOC 3870

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aluminium Chlorohydrate	(CAS-No.) 12042-91-0	60 -80	Met. Corr. 1, H290 Eye Dam. 1, H318
Polydadmec	(CAS-No.) 26062-79-3	20 – 40	Not classified

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Get medical advice/attention if you feel unwell.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. Treat symptomatically. Seek medical attention immediately.
- First-aid measures after skin contact : Wash immediately with lots of water. Take off contaminated clothing and wash it before reuse. Treat symptomatically. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
- First-aid measures after ingestion : Rinse mouth with water. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Do not induce vomiting.

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

- Symptoms/effects : May cause skin irritation. Gastrointestinal complaints. Causes serious eye irritation.
- Symptoms/effects after inhalation : No effects known.
- Symptoms/effects after skin contact : Slight irritation.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : May cause gastrointestinal irritation.
- Chronic symptoms : No effects known.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Polyvalent foam. ABC powder. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : DIRECT FIRE HAZARD. Non-flammable.
- Explosion hazard : No direct explosion hazard.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

- Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.
- Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Evacuate area. Exercise caution when fighting any chemical fire. Take account of environmentally hazardous firefighting water.
- Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid contact with skin, eyes and clothing. Clean up any spills as soon as possible, using an absorbent material to collect it. Do not handle until all safety precautions have been read and understood. Material is slippery when spilled.

6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Safety glasses. Protective clothing.
- Emergency procedures : Mark the danger area. No naked flames. Keep containers closed. Wash contaminated clothes.

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6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Spill area may be slippery.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply.
- Methods for cleaning up : Contain and/or absorb spill with inert material (sand), then place in suitable container.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Thoroughly clean/dry the installation before use. Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations. Facilities: shower, eye shower. Protect from freezing.
- Storage conditions : Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store in a well-ventilated place. Keep cool.
- Incompatible materials : Metals.
- Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.
- Information on mixed storage : KEEP SUBSTANCE AWAY FROM: metals.
- Storage area : Store in a dry area. Meet the legal requirements.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing, correctly labelled, meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: plastics. MATERIAL TO AVOID: steel, aluminium.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Personal protective equipment : Gloves, shoulder length. Protective goggles. Protective clothing. Safety Boots. Insufficient ventilation: wear respiratory protection.
- Hand protection : Gloves, shoulder length
- Eye protection : Protective goggles
- Skin and body protection : Protective clothing
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment



- Environmental exposure controls : Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 133.34 g/mol
Colour	: Clear to pale yellow.
Odour	: Mild odour.
Odour threshold	: No data available
pH	: ≤ 4 25 C
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: < 0 °C
Boiling point	: 114 °C (1 hPa)
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	:
Density	: 1.21 – 1.25 kg/m ³ (25°C)
Solubility	: Miscible with water. Soluble in water. Water:
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 15 – 100 cP @ 25 C
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

Other properties	: Substance has acid reaction.
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SECTION 10: Stability and reactivity

10.1. Reactivity

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride). No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

metals. Corrosion tests were done using Polyaluminium Chloride and the Corrosion Rate was 3,08 mm/year which is less than max of 6.25 mm/year, above which a product is classified as corrosive. Corrosion tests were done using Polydamac and the Corrosion Rate was 1.68 mm/year which is less than max of 6.25 mm/year, above which a product is classified as corrosive.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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LD50 oral rat	> 2000 mg/kg bodyweight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)

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Polydadmec (26062-79-3)

LD50 oral rat	> 2000 mg/kg (Rat)
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Skin corrosion/irritation	: May cause skin irritation pH: ≤ 4 25 C
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Serious eye damage/irritation	: Causes serious eye irritation. pH: ≤ 4 25 C
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Respiratory or skin sensitisation	: Not classified
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Germ cell mutagenicity	: Not classified
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Carcinogenicity	: Not classified
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Reproductive toxicity	: Not classified
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STOT-single exposure	: Not classified
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STOT-repeated exposure	: Not classified
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Aspiration hazard	: Not classified
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Viscosity, kinematic	No data available
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
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Ecology - water	: Maximum concentration in drinking water: 0.200 mg/l (aluminium) (Directive 98/83/EC); 250 mg/l (chloride) (Directive 98/83/EC). Toxic to fishes. Harmful to invertebrates. pH shift. Inhibition of activated sludge.
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LC50 - Fish [1]	> 2.5 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Danio rerio; Static system; Fresh water; Experimental value)
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EC50 - Crustacea [1]	98 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Semi-static system; Fresh water; Experimental value)
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EC50 - Crustacea [2]	42 mg/l (EC10; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Semi-static system; Fresh water; Experimental value)
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Polydadmec (26062-79-3)

LC50 - Fish [1]	0.1 – 1 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Brachydanio rerio)
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12.2. Persistence and degradability

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Persistence and degradability	No (test)data on mobility of the components available.
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Polydadmec (26062-79-3)

Persistence and degradability	Not readily biodegradable in water. No (test)data on mobility of the substance available. Photolysis in the air.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	No bioaccumulation data available.
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Polydadmec (26062-79-3)

Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
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12.4. Mobility in soil

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Surface tension	0.0736 N/m (20 °C; 1 g/l)
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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Product/Packaging disposal recommendations	: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Precipitate/make insoluble. Remove to an authorized dump (Class I). Treat using the best available techniques before discharge into drains or the aquatic environment.
Additional information	: LWCA (the Netherlands): KGA category 01. Hazardous waste according to Directive 2008/98/EC.
European List of Waste (LoW) code	: 16 03 03* - inorganic wastes containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not Regulated
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
IATA	
Transport hazard class(es) (IATA)	: Not applicable

14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

- Overland transport	
No data available	
- Transport by sea	
Transport regulations (IMDG)	: Subject to the provisions
- Air transport	
Transport regulations (IATA)	: Subject to the provisions

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Not listed on REACH Annex XVII
Not listed on the REACH Candidate List

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Not listed on REACH Annex XIV (Authorisation List)

15.1.2. National regulations

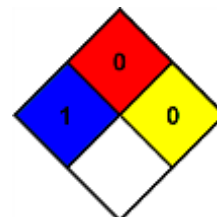
No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

- NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.
- NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation.

SDS ImproChem Test

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