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Conforms to EU Regulation 1907/2006/EC as amended.

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

1.1 Product identifier

Trade name : Magnafloc™ LT22S
FLOCCULANT
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries

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

Use of the Substance/Mixture : Flocculating agent

1.3 Details of the supplier of the safety data sheet Solenis Fascinatio Boulevard 522 2909 VA CAPELLE A/D IJSSEL Netherlands EHSPProductSafetyTeam@solenis.com	1.4 Emergency telephone number +1-302-502-0991 , or contact your local emergency telephone number at 112 Product Information Contact your local Solenis representative
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)


Not a hazardous substance or mixture.

Additional Labelling

EUH210 Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
ADIPIC ACID	124-04-9 204-673-3	Eye Irrit. 2; H319	>= 2,5 - < 5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No symptoms known or expected.


4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No hazards which require special first aid measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray

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Foam

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon monoxide
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)
Hydrocarbons

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Specific extinguishing methods : Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Avoid dust formation.
Avoid breathing dust.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up


- Methods for cleaning up : Pick up and arrange disposal without creating dust.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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Advice on safe handling : Avoid dust formation.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.

Advice on protection against fire and explosion : Take measures to prevent the build up of electrostatic charge.
Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : Avoid breathing dust.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Advice on common storage : No materials to be especially mentioned.

Other data : Keep in a dry place. No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available


SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
ADIPIC ACID	Workers	Inhalation	Systemic, long-term	264 mg/m3
Remarks:	Repeated dose toxicity			
	Workers	Inhalation	Systemic, short-term	264 mg/m3
Remarks:	Repeated dose toxicity			
	Workers	Inhalation	Local, long-term	5 mg/m3
Remarks:	respiratory tract irritation			
	Workers	Inhalation	Local, short-term	5 mg/m3
Remarks:	respiratory tract irritation			
	Workers	Dermal	Systemic, long-term	38 mg/kg
Remarks:	Repeated dose toxicity			
	Workers	Dermal	Systemic, short-term	38 mg/kg
Remarks:	Repeated dose toxicity			
	General population	Inhalation	Systemic, long-term	65 mg/m3
Remarks:	Repeated dose toxicity			
	General population	Inhalation	Systemic, short-term	65 mg/m3

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Remarks:	Repeated dose toxicity			
	General population	Dermal	Systemic, long-term	19 mg/kg
Remarks:	Repeated dose toxicity			
	General population	Dermal	Systemic, short-term	19 mg/kg
Remarks:	Repeated dose toxicity			
	General population	Oral	Systemic, long-term	19 mg/kg
Remarks:	Repeated dose toxicity			
	General population	Oral	Systemic, short-term	19 mg/kg
Remarks:	Repeated dose toxicity			

8.2 Exposure controls

Engineering measures

Provide appropriate exhaust ventilation at places where dust is formed.

General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection : Safety glasses


Skin and body protection : Wear as appropriate:
Safety shoes

Respiratory protection : No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: powder
Colour	: off-white
Odour	: odourless
Odour Threshold	: No data available
pH	: 3,5 - 4,5 Concentration: 10 g/l
Melting point/freezing point	: No data available
Boiling point/boiling range	: Not applicable
Flash point	: Not applicable
Evaporation rate	: No data available

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Flammability (solid, gas)	: not readily ignited
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: not determined
Relative vapour density	: No data available
Relative density	: No data available
Density	: Not applicable
Solubility(ies)	
Water solubility	: Forms a viscous solution.
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: not determined
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: not fire-propagating

9.2 Other information

Self-ignition	: not determined
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SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.


10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	: Product will not undergo hazardous polymerization.
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10.4 Conditions to avoid

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Conditions to avoid : Heat, flames and sparks.

Keep away from heat, flame, sparks and other ignition sources.

10.5 Incompatible materials

Materials to avoid : strong alkalis
Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon monoxide
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)
Hydrocarbons

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD₅₀ (Rat): > 5.000 mg/kg
Method: Acute toxicity estimate

Components:

adipic acid:

Acute oral toxicity : LD₅₀ (Rat): 5.560 mg/kg

Acute inhalation toxicity : LC 50 (Rat): > 7,7 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: No adverse effect has been observed in acute inhalation toxicity tests.


Acute dermal toxicity : LD 50 (Rabbit): > 7.940 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

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Components:

adipic acid:

Result: Mildly irritating to skin

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species: Rabbit

Result: No eye irritation

Remarks: Unlikely to cause eye irritation or injury.

Product dust may be irritating to eyes, skin and respiratory system.

Components:

adipic acid:

Result: Severely irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.


Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

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Components:

adipic acid:

Remarks: Central nervous system

Remarks: Gastro-intestinal system

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Fish): > 10 - 100 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): > 10 - 100 mg/l
aquatic invertebrates Exposure time: 48 h

Components:

adipic acid:

Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 97 mg/l
Exposure time: 96 h
Method: Static
Remarks: Mortality

LC 50 (Danio rerio (zebra fish)): 1.000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC 50 (Water flea (Daphnia magna)): 85,6 mg/l
aquatic invertebrates Exposure time: 48 h

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.


Stability in water : pH: > 6
Hydrolysis: > 70 %(28 d)
Remarks: Hydrolyses readily.

12.3 Bioaccumulative potential

Product:

Bioaccumulation :

Remarks: The bioaccumulation potential cannot be determined.

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Components:

adipic acid:

Partition coefficient: n- : log Pow: 0,08
octanol/water

12.4 Mobility in soil

Product:

Stability in soil : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.


Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

ADR: Not dangerous goods

RID: Not dangerous goods

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INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

14.2 UN proper shipping name

ADR: Not dangerous goods

RID: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

14.3 Transport hazard class(es)

ADR: Not dangerous goods

RID: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

14.4 Packing group

ADR: Not dangerous goods

RID: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

14.5 Environmental hazards

ADR: Not applicable

RID: Not applicable

INTERNATIONAL MARITIME DANGEROUS GOODS: Not applicable

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not applicable

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not applicable


14.6 Special precautions for user

Not applicable

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

Not applicable for product as supplied.

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

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SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

The components of this product are reported in the following inventories:

NZIoC : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory


IECSC : On the inventory, or in compliance with the inventory

TCSI : Not in compliance with the inventory

TSCA : On TSCA Inventory

15.2 Chemical safety assessment

No data available

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SECTION 16: Other information

Further information

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Full text of H-Statements

H319 : Causes serious eye irritation.


Full text of other abbreviations

Eye Irrit. : Eye irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance

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of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by the Solenis Environmental Health and Safety Department.

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

GB / EN