

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

1.1. Product identifier

Product form : Mixture
Trade name : Hyfloc XT543

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

1.2.1. Relevant identified uses

Main use category : Product for water treatments

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

DERYPOL, S.A HQ:	Manufacturing:
C/Plató, n 6, Entlo, 5	C/Cal Gabatx, s/n
08021 Barcelona (Spain)	08520 Les Franqueses del Vallès (Spain)
Tel. +34 93 238 9090	Tel. +34 93 8496188
	regulatory@derypol.com

1.4. Emergency telephone number

Emergency number : +34 93 849 6188
9:00-13:00 h 15:00-17:00 h (GMT + 1)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances: SDS EU > 2015: According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

No labelling applicable

2.3. Other hazards

Other hazards which do not result in classification : Spills will produce extremely slippery surfaces in case of contact with water. Full text of H-statements: see section 16.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Powder cationic polyacrylamide

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Adipic acid substance with national workplace exposure limit(s) (ES, PT)	CAS-No.: 124-04-9 EC-No.: 204-673-3 EC Index-No.: 607-144-00-9 REACH-no: 01-2119457561-38	< 3	Eye Irrit. 2, H319
Sulfamic acid	CAS-No.: 5329-14-6 EC-No.: 226-218-8 EC Index-No.: 016-026-00-0 REACH-no: 01-2119488633-28 01-2119982121-44	< 3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Do not perform any action that poses a risk if proper training is not held. Use the personal protective equipment necessary in the circumstances prevailing in the place of intervention.
First-aid measures after inhalation	: Go to the open air. In case of persistent trouble get medical attention and provide this Material Safety Data Sheet to your physician.
First-aid measures after skin contact	: Remove the maximum amount of product by using absorbent paper and then rinse with plenty of water. In case of persistent irritation get medical advise.
First-aid measures after eye contact	: Rinse thoroughly with plenty of water, also under eyelids, at least for 15 minutes. Get medical assistance. It is necessary having a safety shower in the work area.
First-aid measures after ingestion	: Rinse with water immediatly.No induce vomiting. If the victim is unconscious or convulsing, do not give fluids or induce vomiting.Get medical attention.

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

Symptoms/effects after inhalation	: Slight irritation of the respiratory tract.
Symptoms/effects after skin contact	: Slight irritation of the repeatedly exposed area.
Symptoms/effects after eye contact	: It causes itching and redness.
Symptoms/effects after ingestion	: Gastrointestinal discomfort. Repeated ingestion of the product is considered highly unlikely route of exposure if working in adequate sanitary and hygiene conditions.
Symptoms/effects upon intravenous administration	: Likely routes of exposure: skin and eye.

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

Treat symptomatically. Any ingredient in significant proportion according to the criteria laid down in Regulation 1272/2008 is mentioned in paragraph 3.2 of this Safety Data Sheet. Get medical attention urgently.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water, water spray, dry powder, carbon dioxide (CO ₂), foam.
Unsuitable extinguishing media	: None.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Some hazardous gases can be released, mainly: carbon oxides (Cox) and nitrogen oxides (Nox). In case of combustion in a poor oxygen atmosphere some vapors of hydrochloric acid and hydrocyanic acid can be formed.
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5.3. Advice for firefighters

Precautionary measures fire	: Use self-contained breathing apparatus and chemically protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Do not step on the spill and avoid contact with water. The affected area, in contact with water, will become extremely slippery.

6.1.2. For emergency responders

- Protective equipment : Wear recommended personal protective equipment.

6.2. Environmental precautions

Avoid the ground to be contaminated, natural water courses and wastewater drainage. If contamination occurs inform the corresponding authorities immediately.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Vacuum up or sweep spilled product.
Other information : Clean up with a shovel and then with a brush and dustpan, avoid any rest of the product to remain in the spill area. Finally flush with pressured water and check the cleaning operation efficiency, otherwise the affected area will become extremely slippery.

6.4. Reference to other sections

See Section 8 to have information related to most appropriate personal protection equipment.
See Section 13 to have information related to waste management.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid dust formation. Use local exhaust if dusting occurs. We recommend handling the product in a well ventilated area. Ensure you have a safety shower and eye wash fountain available.
Hygiene measures : Use normal personal hygiene and housekeeping measures when handling any chemical product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Store in cool, dry, well ventilated place. Keep the product in its original containers tightly closed. Avoid static discharges. Keep in a covered place, fresh and with the bag / drum tightly closed. Once the drum / bag is open and you do not consume all the product you must be very careful to close it effectively. This product is hygroscopic and will adsorb water, resulting in a hard surface of coagulated particles. To avoid corrosion and product degradation metallic containers and / or equipment must not be used.
Storage conditions : Avoid extreme temperatures (below "Minimum temperature" and above "Maximum temperature"). Keep in a covered place, with the drum well closed and within the "Recommended temperature range".
Storage temperature : 5 – 35 °C

7.3. Specific end use(s)

For all the expected uses of the product the indications given above are considered appropriate.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

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8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Use local exhaust systems if dusty atmospheres occur, otherwise general ventilation is sufficient. You should always have a safety shower and eyewash in the area where the product is handled.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Goggles to avoid dust reaching the eyes by diffusion

8.2.2.2. Skin protection

Skin and body protection:

Use a chemical resistant apron or full protective equipment depending on the handling level and contact risks with the product and its dissolutions

Hand protection:

Use latex gloves, or natural rubber gloves

8.2.2.3. Respiratory protection

Respiratory protection:

Not necessary under normal conditions and provided good general ventilation

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid spills that contaminate the underground, surface water streams and sewer system.

Other information:

Wash your hands and anybody area that has resulted exposed to the product before drinking, eating, using the services and end of the work period.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: white.
Appearance	: White granulated solid.
Odour	: None.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Non combustible
Explosive properties	: Product is not explosive.
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: Not applicable

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Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 200 °C
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: 3.8 – 4.4 mm ² /s <Falta traducción : />
Solubility	: Water soluble. Solutions for concentrations above 1% become very viscous. Product solubility limit depend on dissolution conditions (concentration, pH, temperature, preparation system - agitation).
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: < 0
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: 0.6 – 0.9
Relative vapour density at 20 °C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product has no hazardous reactivity beyond that specified in paragraph 10.5.

10.2. Chemical stability

Stable under normal handling and storage conditions. See section 7. On exposure to air carbonation occurs. It is highly hygroscopic and its dilution is accompanied by large heat release.

10.3. Possibility of hazardous reactions

There is no risk of polymerization.

10.4. Conditions to avoid

None for safety reasons. For keeping the original properties of the product follow the recommendations given in Section 7.

10.5. Incompatible materials

Strong oxidizers may cause exothermic reactions. As a general rule we recommend avoiding the contact with strong chemical reagents, such as acids, bases, reductors and oxidizers.

10.6. Hazardous decomposition products

Hydrogen chloride. Carbon oxides (CO, CO₂). Nitrogen oxides.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified

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Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : No data available. The product is not expected to be toxic by inhalation.

Hyfloc XT543	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg

Adipic acid (124-04-9)	
LD50 oral rat	5560 mg/kg
LD50 dermal rabbit	7940 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	> 7.7 mg/l/4h

Sulfamic acid (5329-14-6)	
LD50 oral rat	3160 mg/kg (OECD 401)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight transitory conjunctival effects similar to those which all granular materials have on conjunctivae. The most likely routes of exposure are skin and/or eye contact. Prolonged eye contact may cause temporary irritation. Flush eyes immediately. Follow the safety recommendations of paragraph 4.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : No known effect.

Sulfamic acid (5329-14-6)	
NOAEL (dermal, rat/rabbit)	2000 mg/kg bodyweight (OCDE 402)

STOT-repeated exposure : No known effect.
Aspiration hazard : No aspiration hazard is expected in normal use.

Hyfloc XT543	
Viscosity, kinematic	3.8 – 4.4 mm ² /s <Falta traducción : />

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

Potential adverse human health effects and symptoms : No effects whatsoever related to exposure to the product are known.
Other information : No additional hazard is expected owing to the blend of the constituent ingredients of this product, Through our experience and according to the information available, the product is not harmful to health if handled correctly according to the recommendations given, Likely routes of exposure: skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalides the test.
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Hyfloc XT543	
LC50 - Fish [1]	5 – 10 mg/l Danio rerio (OECD 203)

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Hyfloc XT543	
EC50 - Crustacea [1]	20 – 50 mg/l Daphnia magna (OCDE 202)
Adipic acid (124-04-9)	
LC50 - Fish [1]	> 1000 mg/l Danio rerio
EC50 - Crustacea [1]	46 mg/l Daphnia magna (OCDE 202)
NOEC (chronic)	6.3 mg/l Daphnia magna (21 days)
Sulfamic acid (5329-14-6)	
LC50 - Fish [1]	70.3 mg/l (OECD 203)
EC50 - Crustacea [1]	71.6 mg/l (Daphnia magna, OCDE 202)
EC50 72h - Algae [1]	48 mg/l (Scenedesmus subspicatus, OCDE 201)

12.2. Persistence and degradability

Hyfloc XT543	
Persistence and degradability	Hardly biodegradable. Hydrolysis derivatives are not harmful to aquatic organisms.
Biodegradation	> 70 % (28 days, pH 6-8)
Adipic acid (124-04-9)	
Biodegradation	70 % (28 days, OECD 301 D)

12.3. Bioaccumulative potential

Hyfloc XT543	
Partition coefficient n-octanol/water (Log Pow)	< 0
Bioaccumulative potential	The product is not expected to bioaccumulate.
Adipic acid (124-04-9)	
Partition coefficient n-octanol/water (Log Pow)	0.093 25 °C, pH 3.3

12.4. Mobility in soil

Hyfloc XT543	
Ecology - soil	No information available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : None to mention.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : If this product must be disposed as a waste the final user must do it accordingly with the European, national and local regulations. Use only authorised companies. Keep the same recommendations provided in Sections 7 and 8 of this MSDS. Dispose of contents/container in accordance with licensed collector's sorting instructions. Furthermore, the user must consider the possible national/local regulations.
- Sewage disposal recommendations : At the habitual doses of this product no harm is expected for the microorganisms present in secondary treatments in waste water treatment plants.

SECTION 14: Transport information

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

14.1. UN number or ID number

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

14.2. UN proper shipping name

- Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : 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

- ADN**
Transport hazard class(es) (ADN) : Not applicable

- RID**
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

- Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

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

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14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

The product should be considered a mixture. Given its classification is not necessary to perform a chemical safety assessment thereof.

SECTION 16: Other information

Indication of changes

Section	Changed item	Change	Comments
	SDS EU format according to COMMISSION REGULATION (EU) 2020/878	Added	

Other information

: The latest version of the MSDS of this product can be obtained through the link <https://www.derypol.com/en/technical-documentation/>.

Full text of H- and EUH-statements

Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation.

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Full text of H- and EUH-statements	
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet applicable for regions : GB

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.