

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Hyfloc C410

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : 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)

Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Signal word (CLP) : -  
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.  
Precautionary statements (CLP) : P273 - Avoid release to the environment.

#### 2.3. Other hazards

Other hazards which do not result in classification : Spills will produce extremely slippery surfaces in case of contact with water.

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

# Hyfloc C410

## Safety Data Sheet

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

### 3.2. Mixtures

Comments : Cationic polymer in aqueous solution

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aliphatic polyamine	CAS-No.: 42751-79-1	48-52	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	: 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 inhalation	: Go to the open air and cleanse thoroughly your nose and mouth with plenty of water. In case of persistent trouble get medical attention and provide this Material Safety Data Sheet to your physician.
First-aid measures after skin contact	: Rinse the skin affected with plenty of water. Then wash it again with water and soap. In case of irritation, if it persists, get medical advice.
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	: If accidentally is swallowed obtain immediately medical attention. Keep at rest. Never induce vomiting.

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

Symptoms/effects after inhalation	: No acute effects are expected, except for an allergic reaction to any of the individual product ingredients.
Symptoms/effects after skin contact	: None expected.
Symptoms/effects after eye contact	: None under normal conditions.
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.
Chronic symptoms	: None known.

### 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 <sub>2</sub> ), 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.
--	---

### 5.3. Advice for firefighters

Precautionary measures fire	: Eliminate all ignition sources if safe to do so. Fight fire with normal precautions from a reasonable distance. Use self-contained breathing apparatus and chemically protective clothing.
-----------------------------	--

# Hyfloc C410

## Safety Data Sheet

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

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Protective equipment : Avoid exposure to vapour. Avoid eyes, skin and clothes contact. Use personal protective equipment. Ensure adequate ventilation.
- 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 : Use personal protective equipment. Keep away from people without protection. Slipping hazard if spilled load. Avoid contact with eyes and skin. Do not breathe vapors or spray mist. Personal protective equipment, see section 8.

#### 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 : For small spills use inert absorbent materials and remove with a shovel; then flush the affected area with pressured water. For large spills contain them with absorbent material and pump out the product to adequate containers; then flush the affected area with pressured water.

#### 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 : We recommend handling the product in a well ventilated area. Ensure you have a safety shower and eye wash fountain available. Keep absorbent material as a precaution against spills. Use normal personal hygiene and housekeeping measures when handling any chemical product.
- Handling temperature : 5 – 30

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well ventilated and cool place, away from heat and frost, in closed containers in accordance with safety standards. Instruct as storage standards. Polyamines are products sensitive to oxidation side-reactions of the polymeric ending groups. The main factors for this phenomenon are exposure to sunlight, temperature and time of storage. It provokes the change of color(may become reddish), but no matter how intense this process is it will not affect the product performance. Protect from sunlight.
- Storage temperature : 0 – 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

# Hyfloc C410

## Safety Data Sheet

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

### 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:

Provide adequate ventilation, this can be achieved through good local extraction-ventilation and good general extraction system. If this were not enough, must be suitable respiratory equipment. 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:

Safety glasses with side-shields

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Use your standard work clothes. In case of long contact with the product and risk of splash of its dissolutions use full waterproof suit

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Polyvinylchloride (PVC), Natural rubber, Nitrile rubber (NBR), Latex, Vinyl				

### Other skin protection

#### Materials for protective clothing:

Use your standard work clothes. In case of long contact with the product and risk of splash of its dissolutions use full waterproof suit

#### 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

#### Consumer exposure controls:

Be aware of your exposure to products used in your workplace and act responsibly to avoid contaminating other areas. Try to develop good health habits, check with your company responsible for help. 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. You should always have a safety shower and eyewash in the area where the product is handled.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Not available
Appearance	: Colourless to yellowish liquid.
Odour	: Amine-like.

# Hyfloc C410

## Safety Data Sheet

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

Odour threshold	: Not available
Melting point	: < 5 °C
Freezing point	: Not available
Boiling point	: > 100 °C
Flammability	: Not available
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: The product is not easily ignited
Auto-ignition temperature	: Not available
Decomposition temperature	: > 150 °C
pH	: 2.5 – 6
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 400 – 1500 cP
Solubility	: Completely miscible.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: < 0
Vapour pressure	: 2.3 kPa (20 °C)
Vapour pressure at 50 °C	: Not available
Density	: 1.14 – 1.19 g/cm <sup>3</sup>
Relative density	: 1.1 – 1.2
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

### 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. However there may be a risk of water contamination of the product during handling and use. Water or water-based products, will dissolve partially and imperfectly the product, and may cause it to be very difficult to use in the application (gel formation, clogged pipes and pumps).

### 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

No risk of explosion or polymerization or inflammation on contact with air, even at high temperatures (<100 °C) and in the presence of ignition sources.

### 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

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

# Hyfloc C410

## Safety Data Sheet

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

### 10.6. Hazardous decomposition products

Thermal decomposition products (in case of fire) are indicated in Section 5. None under normal conditions.

## SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### Hyfloc C410

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

#### Aliphatic polyamine (42751-79-1)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation	: Not irritating to skin pH: 2.5 – 6
Serious eye damage/irritation	: May cause slight irritation pH: 2.5 – 6
Respiratory or skin sensitisation	: This product is not expected to be sensitizing.
Germ cell mutagenicity	: No information available on this specific product, however by analogy, the product is considered to be: Not mutagenic.
Carcinogenicity	: No information available on this specific product, however by analogy, the product is considered to be: Not carcinogenic.
Reproductive toxicity	: No information available on this specific product, however by analogy, the product is considered to be: It is not toxic for reproduction
STOT-single exposure	: No known effect.
STOT-repeated exposure	: No known effect.
Aspiration hazard	: No aspiration hazard is expected in normal use.

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: No data available
--	---------------------

#### 11.2.2. Other information

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: No data available.

#### Hyfloc C410

LC50 - Fish [1]	10 – 100 mg/l Danio rerio
EC50 - Crustacea [1]	10 – 100 mg/l Daphnia magna. Data for a representative polymer.
EC50 72h - Algae [1]	Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

# Hyfloc C410

## Safety Data Sheet

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

### 12.2. Persistence and degradability

#### Hyfloc C410

Persistence and degradability	This product is not rapidly biodegradable. This product does not hydrolyse.
-------------------------------	---

### 12.3. Bioaccumulative potential

#### Hyfloc C410

Bioconcentration factor (BCF REACH)	≈ 0
Partition coefficient n-octanol/water (Log Pow)	< 0
Bioaccumulative potential	The product is not expected to bioaccumulate.

### 12.4. Mobility in soil

#### Hyfloc C410

Ecology - soil	No information available.
----------------	---------------------------

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : No data available

### 12.7. Other adverse effects

Other adverse effects : None to mention.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Keep the same recommendations provided in Sections 7 and 8 of this MSDS. 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. Furthermore, the user must consider the possible national/local regulations.

## 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

# Hyfloc C410

## Safety Data Sheet

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

### 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

### 14.6. Special precautions for user

#### Overland transport

No data available

#### Transport by sea

No data available

#### Air transport

No data available

#### Inland waterway transport

No data available

#### Rail transport

No data available

### 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

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.

# Hyfloc C410

## Safety Data Sheet

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

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

#### Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

giftige stoffen – Ontwikkeling

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Adverse health effects caused by endocrine disrupting properties	Added	
	Adverse effects on the environment caused by endocrine disrupting properties	Added	
	Hazardous to the aquatic environment, long-term (chronic) - comment	Added	
	STOT-single exposure - comment	Added	
	STOT-repeated exposure - comment	Added	
	Skin corrosion/irritation - comment	Added	
	Respiratory or skin sensitisation - comment	Added	
	Reproductive toxicity - comment	Added	
	Germ cell mutagenicity - comment	Added	
	Serious eye damage/irritation - comment	Added	
	Carcinogenicity - comment	Added	
	Aspiration hazard - comment	Added	
	SDS EU format	Added	
	Supersedes	Modified	
	Issue date	Modified	
	Revision date	Modified	
3.2	Comments (on top of composition)	Added	
4.2	Symptoms/effects upon intravenous administration	Added	
4.2	Symptoms/effects after ingestion	Added	
4.2	Symptoms/effects after eye contact	Added	

# Hyfloc C410

## Safety Data Sheet

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

Indication of changes			
Section	Changed item	Change	Comments
4.2	Chronic symptoms	Added	
4.3	Other medical advice or treatment	Modified	
5.1	Unsuitable extinguishing media	Added	
5.2	Hazardous decomposition products in case of fire	Modified	
5.3	Precautionary measures fire	Added	
6.1	Protective equipment	Modified	
7.2	Storage conditions	Modified	
8.2	Consumer exposure controls	Added	
9.1	Vapour pressure	Added	
9.1	Log Pow	Added	
9.1	Melting point	Modified	
9.1	Flash point	Modified	
10.5	Incompatible materials	Modified	
12.1	EC50 Daphnia 1	Modified	
12.1	EC50 72h algae (1)	Modified	
12.1	LC50 fish 1	Modified	
12.3	Bioconcentration factor (BCF REACH)	Added	
12.3	Log Pow	Added	
12.4	Ecology - soil	Added	
12.6	Other adverse effects	Added	
13.1	Waste treatment methods	Modified	
16	Other information	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
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]		
Aquatic Chronic 3	H412	Expert judgment

Safety Data Sheet applicable for regions : DE;DK;ES;FI;FR;IT;NL;PL;PT;GB;RU;SE

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.