

# Safety Data Sheet

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

Reference number: Hyfloc AC9

Issue date: 12/15/2022 Revision date: 12/15/2022 Supersedes version of: 10/1/2021 Version: 14.0

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

#### 1.1. Product identifier

Product form : Mixture Trade name : Hyfloc AC9

### 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

Industrial/Professional use spec : Industrial

Use of the substance/mixture : Product for water treatments

Title	Use descriptors
Industrial and professional use in drinking water and wastewater treatment (ES Ref.: Hyfloc AC9)	SU2a, SU2b, SU5, SU6b, SU9, SU23, PC20, PC21, PC37, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC19, ERC2, ERC4, ERC6b, ERC8a, ERC8b, ERC8d

Full text of use descriptors: see section 16

#### 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)

H290 Corrosive to metals, Category 1 Skin corrosion/irritation, Category 1 H314

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]

Hazard pictograms (CLP)

GHS05

Signal word (CLP) : Danger

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Contains : Aluminium polychloride

Hazard statements (CLP) : H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Immediately call a POISON CENTER or doctor.

P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER or doctor.

P390 - Absorb spillage to prevent material damage. P310 - Immediately call a POISON CENTER, a doctor.

#### 2.3. Other hazards

Other hazards which do not result in classification : 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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aluminium polychloride	CAS-No.: 1327-41-9 EC-No.: 215-477-2 REACH-no: 01-2119531563- 43	15 – 25	Met. Corr. 1, H290 Eye Dam. 1, H318

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 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 : Do not induce vomiting. Rinse mouth out with water. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects : None expected.
Symptoms/effects after inhalation : None expected.
Symptoms/effects after skin contact : None expected.

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Symptoms/effects after eye contact : Causes irritation.

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 (CO2), foam.

Unsuitable extinguishing media : None.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Hydrogen chloride.

#### 5.3. Advice for firefighters

Firefighting instructions : In case of fire extinguishing all means are permitted. In case of water, careful not to get into

drains, pipes or channels to ensure that water is not contaminated.

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

# **SECTION 6: Accidental release measures**

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

#### 6.1.1. For non-emergency personnel

Protective equipment : Avoid eyes and skin contact; use personal protective equipment.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Protective gloves.

Safety glasses.

Emergency procedures : Prevent from entering sewers, basements and workpits, or any place where its

accumulation can be dangerous.

#### 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

For containment : Stop leak without risks if possible.

Methods for cleaning up : Clean contaminated surfaces with an excess of water. This material and its container must

be disposed of in a safe way, and as per local legislation.

#### 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

Additional hazards when processed : Avoid contact with skin, eyes and clothing.

Precautions for safe handling : Provide adequate ventilation. Use normal personal hygiene and housekeeping measures

when handling any chemical product. 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.

Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse.

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

Technical measures : Store in cool, well-ventilated places. Keep containers tightly closed. Protect from exposure

to sun. Keep the product away from incompatible materials and heat sources.

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".

Incompatible products : Base

Incompatible materials : Metals. Avoid contact with galvanized surfaces and carbon steel, strong bases, chlorite,

hypochlorite and sulfite. As a result of the reaction with these compounds some dangerous

substances may be produced.

Storage temperature :  $0 - 30 \,^{\circ}\text{C}$ 

Packaging materials : Store always product in container of same material as original container.

## 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

#### 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

Hyfloc AC9		
PNEC (Water)		
PNEC aqua (freshwater) 0.3 mg/l aluminium dissolved		
PNEC aqua (marine water) 0.03 mg/l aluminium dissolved		
PNEC (Soil)		
PNEC soil 1 mg/kg dwt		
PNEC (STP)		
PNEC sewage treatment plant 20 mg/l Al		

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Natural ventilation is adequate in open areas. Provide mechanical ventilation in confined spaces.

#### 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

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#### Hand protection:

PVC 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.

#### Consumer exposure controls:

You should always have a safety shower and eyewash in the area where the product is handled.

#### Other information:

Viscosity, kinematic

Viscosity, dynamic

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. 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.

### **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : Not available : Yellow liquid. Appearance : characteristic. Odour : Not available Odour threshold : -15 °C Melting point Freezing point Not available Boiling point : Not available Flammability : Not flammable **Explosive limits** : Not available Lower explosive limit (LEL) : Not available Upper explosive limit (UEL) : Not available Flash point Not available Auto-ignition temperature : Not available Decomposition temperature : Not available 0.5 - 1.5

Solubility : Dilutable in all proportions.

: Not available : < 150 cP

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : 1.36 g/cm³ Relative density : Not available

Relative vapour density at 20 °C : 0

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

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#### 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 a character of strong acid, therefore corresponds reactivity with this feature.

#### 10.2. Chemical stability

Stable under normal handling and storage conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. As a general rule we recommend avoiding the contact with strong chemical reagents, such as acids, bases, reductors and oxidizers.

#### 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

Bases. Avoid contact with chlorite, hypochlorite and sulfite. As a result of the reaction with these compounds some dangerous substances may be produced. May be corrosive to metals.

#### 10.6. Hazardous decomposition products

Thermal decomposition products (in case of fire) are indicated in Section 5.

# **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

Aluminium polychloride (1327-41-9)			
LD50 oral rat	> 2000 mg/kg		
LD50 dermal	2000 mg/kg bodyweight		
LC50 Inhalation - Rat	5 g/m³		
Skin corrosion/irritation :	Causes severe skin burns.		
	pH: $0.5-1.5$ Although the product is not classified as irritant we note that prolonged contact may cause		

mild irritation.

Serious eye damage/irritation : Assumed to cause serious eye damage

 $\begin{array}{cccc} & & \text{pH: } 0.5-1.5 \\ \text{Respiratory or skin sensitisation} & : & \text{Not classified} \\ \text{Germ cell mutagenicity} & : & \text{Not classified} \\ \text{Carcinogenicity} & : & \text{Not classified} \\ \text{Reproductive toxicity} & : & \text{Not classified} \\ \end{array}$ 

	LOAEL (animal/male, F0/P)	90 mg/kg bodyweight

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Aluminium polychloride (1327-41-9)		
NOAEL (animal/male, F0/P)		90 mg/kg bodyweight
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
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

Potential adverse human health effects and

: No symptoms expected if the product is properly handled.

Other information

: Likely routes of exposure: skin and eye, Through our experience and according to the information available, the product is not harmful to health if handled correctly according to

the recommendations given.

# **SECTION 12: Ecological information**

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term

: Not classified

Hazardous to the aquatic environment, long-term

: Not classified

(chronic)

Aluminium polychloride (1327-41-9)		
LC50 - Fish [1]	> 1.39 mg/l Danio rerio	
EC50 - Crustacea [1]	98 mg/l (OECD TG 202)	
EC50 72h - Algae [1]	15.6 mg/l (Pseudokirchneriella subcapitatat, OECD TG201)	
NOEC chronic fish	> 1000 ppm (OECD 203)	
NOEC chronic algae 1.1 mg/l (72h, Pseudokirchneriella subcapitata, OECD TG201)		

### 12.2. Persistence and degradability

Aluminium polychloride (1327-41-9)	
Persistence and degradability	Not established.

# 12.3. Bioaccumulative potential

Aluminium polychloride (1327-41-9)	
Bioaccumulative potential	not bioaccumulable.

### 12.4. Mobility in soil

Aluminium polychloride (1327-41-9)	
Ecology - soil	Depending on the pH, dissolved aluminum precipitates quickly so its impact on the environment is reduced significantly.

### 12.5. Results of PBT and vPvB assessment

No additional information available

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### 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

: 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.

# **SECTION 14: Transport information**

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

### 14.1. UN number or ID number

 UN-No. (ADR)
 : UN 3264

 UN-No. (IMDG)
 : UN 3264

 UN-No. (IATA)
 : UN 3264

 UN-No. (ADN)
 : UN 3264

 UN-No. (RID)
 : UN 3264

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. Proper Shipping Name (IMDG) : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Proper Shipping Name (IATA) : Corrosive liquid, acidic, inorganic, n.o.s.

Proper Shipping Name (ADN) : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. Proper Shipping Name (RID) : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Transport document description (ADR) : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium polychloride;

Aluminium polychloride), 8, III, (E)

Transport document description (IMDG) : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium polychloride), 8,

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Transport document description (IATA) : UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (Aluminium polychloride), 8, III

Transport document description (ADN) : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium polychloride), 8,

Ш

Transport document description (RID) : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium polychloride), 8,

Ш

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8

:



### **IMDG**

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8

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8

IATA

Transport hazard class(es) (IATA) : 8
Danger labels (IATA) : 8



ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8



RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8



# 14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

#### 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

Classification code (ADR) : C1
Special provisions (ADR) : 274
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions : TP1, TP28

(ADR)

Tank code (ADR) : L4BN
Tank special provisions (ADR) : TU42
Vehicle for tank carriage : AT

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Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80

Orange plates :

80 3264

Tunnel restriction code (ADR) : E
EAC code : 2X
APP code : B

Transport by sea

Special provisions (IMDG) : 223, 274 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) : P001, LP01 IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T7 Tank special provisions (IMDG) : TP1, TP28 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-B

Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW2

Segregation (IMDG) : SGG1, SG36, SG49

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) : Y841 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 852 PCA max net quantity (IATA) : 5L : 856 CAO packing instructions (IATA) : 60L CAO max net quantity (IATA) : A3, A803 Special provisions (IATA) ERG code (IATA) : 8L

Inland waterway transport

Classification code (ADN) : C1
Special provisions (ADN) : 274
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C1
Special provisions (RID) : 274
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T7
Portable tank and bulk container special provisions : TP1, TP28

(RID)

Tank codes for RID tanks (RID) : L4BN
Special provisions for RID tanks (RID) : TU42
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

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### 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.

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 1, Slightly 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

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

: None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

#### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out

### **SECTION 16: Other information**

Indication of changes					
Section Changed item		Change	Comments		
	Issue date	Modified			
	Revision date	Modified			
	Supersedes	Modified			
	Adverse effects on the environment caused by endocrine disrupting properties	Added			
	Adverse health effects caused by endocrine disrupting properties	Added			
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	
Eye Dam. 1 Serious eye damage/eye irritation, Category 1	

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Full text of H- and EUH-statements	
Met. Corr. 1	Corrosive to metals, Category 1
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Full text of use descriptors		
ERC2	Formulation into mixture	
ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)	
ERC6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)	
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)	
ERC8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)	
ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)	
PC20	Metal surface treatment products	
PC21	Laboratory chemicals	
PC37	Water treatment chemicals	
PROC19	Manual activities involving hand contact	
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions	
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition	
PROC4	Chemical production where opportunity for exposure arises	
PROC5	Mixing or blending in batch processes	
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities	
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)	
SU23	Electricity, steam, gas water supply and sewage treatment	
SU2a	Mining, (including offshore industries)	
SU2b	Offshore industries	
SU5	Manufacture of textiles, leather, fur	
SU6b	Manufacture of pulp, paper and paper products	
SU9	Manufacture of fine chemicals	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]		
Met. Corr. 1	H290	Calculation method
Skin Corr. 1	H314	On basis of test data

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.

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# Annex to the safety data sheet

Identified Uses	Es N°	Short title	Page
Industrial and professional use in drinking water and wastewater treatment	1		14

# Annex to the safety data sheet: Exposure scenario

Reference number: Hyfloc AC9 Product form: Mixture Physical state: Liquid

# 1. Hyfloc AC9 - Industrial, Formulation; Industrial and professional use in drinking water and wastewater treatment

#### 1.1. Title section

Industrial and professional use in drinking water and wastewater treatment

ES Ref.: Hyfloc AC9
ES Type: Worker
Version: 1.1

Author: Regulatory Department
Association ref code: Hyfloc AC9
Issue date: 11/29/2021

Revision date: 11/29/2021

Environment		Use descriptors
Hyfloc AC9	Contributing scenario controlling environmental exposure	ERC2, ERC4, ERC6b, ERC8a, ERC8b, ERC8d

Worker		Use descriptors
Hyfloc AC9	Contributing scenario controlling worker exposure	PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC19, PC20, PC21, PC37

Processes, tasks, activities covered	Covers the use of the substance for the treatment of water at industrial facilities in closed
	or contained systems including incidental exposures during material transfers and
	equipment cleaning

# 1.2. Conditions of use affecting exposure

# 1.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC2, ERC4, ERC6b, ERC8a, ERC8b, ERC8d)

ERC2	Formulation into mixture
ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

# Technical and organisational conditions and measures

Technical measures

On-site wastewater treatment prior to discharge to sewer or public waterway. Gaseous emissions purification by means of a scrubber tower (good practice). The waste is recycled or managed in accordance with the legislation

#### Conditions and measures related to treatment of waste (including article waste)

Deposition methods Sodium carbonate, slaked lime (calcium hydroxide), sodium hydroxide, etc, can be used as neutralizing agents.

- Used containers should be disposed of in accordance with applicable legislation.

# Annex to the safety data sheet: Exposure scenario

Reference number: Hyfloc AC9 Product form: Mixture Physical state: Liquid

# 1.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC19, PC20, PC21, PC37)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC19	Manual activities involving hand contact
PC20	Metal surface treatment products
PC21	Laboratory chemicals
PC37	Water treatment chemicals

Product (article) characteristics	
Physical form of product	Liquid

Amount used (or contained in articles), frequency and duration of use/exposure		
Variable between ml (sampling) and cubic meters (transfers).		
Covers daily exposures up to 8 hours		

Technical and organisational conditions and measures	
Technical measures	Work equipment must be in good working condition and must be properly maintained Clean up spills immediately. Order and cleanliness must be maintained in the workplace. The use of closed/automatic systems for handling the product is recommended, as well as coverage of open containers (e.g. by means of screens). Filling of containers with automatic dosing systems is recommended. It is recommended to clean the equipment and lines before disconnection and/or maintenance
Organisational measures	Workers must be trained to (a) not perform unprotected work,(b9) know the hazards of the product,(c) comply with the safety procedures provided by the operator of the user facility. The Facility Owner must ensure that the required PPE is available and used in accordance with the instructions for its use and established work procedures.

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear respiratory protection when its use is identified for certain contributing scenarios.	
Hand protection	Wear suitable gloves tested to EN374
Eye protection	Safety glasses with side-shields

# Annex to the safety data sheet: Exposure scenario

Reference number: Hyfloc AC9 Product form: Mixture Physical state: Liquid

Conditions and measures related to personal protection, hygiene and health evaluation	
Skin and body protection	Avoid contact with skin. Use your standard work clothes. In case of long contact with the product and risk of splash of its dissolutions use full waterproof suit
General protective and hygienic measures	Always wash your hands immediately after handling this product, and once again before leaving the workplace

# 1.3. Exposure estimation and reference to its source

1.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC2, ERC4, ERC6b, ERC8a, ERC8b, ERC8d)

No information available

1.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC19, PC20, PC21, PC37)

No information available

### 1.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

#### 1.4.1. Environment

No data available

#### 1.4.2. Health

No data available