

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 1/5/2023 Revision date: 1/5/2023 Supersedes version of: 5/28/2018 Version: 7.0

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

#### 1.1. Product identifier

Product form : Mixture
Trade name : Hyfloc FL7

#### 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

Title	Use descriptors
Industrial and professional use in drinking water and wastewater treatment (ES Ref.: Hyfloc FL7)	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)

Corrosive to metals, Category 1 H290 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

Contains : Aluminium polychloride; Chlorhydric Acid; Aluminium sulphate

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

H314 - Causes severe skin burns and eye damage.

# Safety Data Sheet

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

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.

#### 2.3. Other hazards

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 : Water soluble cationic monomer

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	<40	Met. Corr. 1, H290 Eye Dam. 1, H318
Chlorhydric Acid substance with national workplace exposure limit(s) (DE, ES, FR, IT, PT); substance with a Community workplace exposure limit	CAS-No.: 7647-01-0 EC-No.: 231-595-7;231-596-7 EC Index-No.: 017-002-01-X REACH-no: 01-2119484862- 27	5 – 25	Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335
Aluminium sulphate	CAS-No.: 10043-01-3 EC-No.: 233-135-0 REACH-no: 01-2119531538- 36	0.1 – 3	Met. Corr. 1, H290 Eye Dam. 1, H318

Full text of H-statements: see section 16

# **SECTION 4: First aid measures**

First-aid measures after inhalation

First-aid measures after skin contact

First-aid measures after eye contact

# 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.

Call a poison center or a doctor if you feel unwell.

: 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.

: 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.

: 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.

1/5/2023 (Revision date) EN (English) 2/18

# Safety Data Sheet

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

First-aid measures after ingestion

: 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.

## 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 : Causes skin irritation.

Symptoms/effects after eye contact : May include: itching, pain, redness, tears.

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 (CO2), foam.

Unsuitable extinguishing media : None.

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

Hazardous decomposition products in case of fire : Thermal decomposition (>200 oC) can evolve fumes of HCl o SOx.

#### 5.3. Advice for firefighters

Precautionary measures fire : Use self-contained breathing apparatus.

Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Evacuate area. 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.

Emergency procedures

: Restrict access to area. Remove immediately contaminated clothes. Wash with plenty of water and soap the conatminated surfaces. Use safety goggles, PVC gloves and waterproof boots. Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it es safe to do so. Ventilate spill area if possible. Ensure clean-up is conducted by trained personnel only. Do not touch spilled material. Have

emergency equipment (for fires, spills, leaks, etc.) readily available.

#### 6.1.2. For emergency responders

Protective equipment : Self-contained breathing apparatus. Total impervious protective suits, gloves, and boots

must be worn to prevent any contact with the product.

#### 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

: 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.

1/5/2023 (Revision date) EN (English) 3/18

# Safety Data Sheet

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

#### 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 : Handle product in areas with suitable conditions and equipment. Foresee the possibility of a spill and take preventive measures, including: having absorbent material nearby, establish

working conditions (racking circuit arrangement, valve position, clearwork area, etc..) to avoid that, in case of spillage, contamination of collectors, water courses or soil occurs.

Precautions for safe handling : Wear recommended personal protective equipment. 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.

Handling temperature : 10-30

Hygiene measures : Use normal personal hygiene and housekeeping measures when handling any chemical

product.

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

Storage conditions : Store in cool, dry, well ventilated place. Keep the product in its original containers tightly

closed.

Incompatible products : Bases. Metals. Storage temperature : 10-50 °C

Storage area : Using equipment manufactured in acid-resistant material such as fiberglass, polyester,

polyethylene or polypropylene.

#### 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

Chlorhydric Acid (7647-01-0)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Hydrogen chloride
IOEL TWA	8 mg/m³
IOEL TWA [ppm]	5 ppm
IOEL STEL	15 mg/m³
IOEL STEL [ppm]	10 ppm
France - Occupational Exposure Limits	
Local name	Chlorure d'hydrogène
VLE (OEL C/STEL)	7.6 mg/m³
VLE (OEL C/STEL) [ppm]	5 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Hydrogenchlorid
AGW (OEL TWA) [1]	3 mg/m³
AGW (OEL TWA) [2]	2 ppm

# Safety Data Sheet

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

Chlorhydric Acid (7647-01-0)	
` '	DEC ELLY
Remark	DFG,EU,Y
Italy - Occupational Exposure Limits	
Local name	Acido cloridrico
OEL TWA	8 mg/m³
OEL TWA [ppm]	5 ppm
OEL STEL	15 mg/m³
OEL STEL [ppm]	10 ppm
Portugal - Occupational Exposure Limits	
Local name	(1) Ácido clorídrico
OEL C [ppm]	2 ppm
Spain - Occupational Exposure Limits	
Local name	Cloruro de hidrógeno
VLA-ED (OEL TWA) [1]	7.6 mg/m³
VLA-ED (OEL TWA) [2]	5 ppm
VLA-EC (OEL STEL)	15 mg/m³
VLA-EC (OEL STEL) [ppm]	10 ppm
Notes	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.)

# 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:

Natural ventilation is adequate in open areas. Provide mechanical ventilation in confined spaces. You should always have a safety shower and eyewash in the area where the product is handled.

## 8.2.2. Personal protection equipment

# Personal protective equipment symbol(s):







# Safety Data Sheet

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

#### 8.2.2.1. Eye and face protection

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety goggles		With side shields	EN 166, EN 167, EN 168

## 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					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Polyvinylchloride (PVC)	6 (> 480 minutes)	>0.35		EN 374-2, EN 374-3, EN 420

#### Other skin protection

#### Materials for protective clothing:

Safety foot-wear

#### 8.2.2.3. Respiratory protection

Respiratory protection			
Device	Filter type	Condition	Standard
	Filter A2/B2, ABEK, Particle filter, Type P1, Type AX - Low-boiling (<65 °C) organic compounds, Type P2, Type P3		EN 136, EN 140, EN 405

# 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:

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. Take off contaminated clothing and wash before reuse.

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

# 9.1. Information on basic physical and chemical properties

: Liquid Physical state : Not available Colour : Yellowish liquid. Appearance Molecular mass : Low molecular weight. Odour : Weak pungent odor. Odour threshold Not available Melting point Not available Freezing point Not available Boiling point Not available Flammability Not available Explosive limits Not available Lower explosive limit (LEL) Not available Upper explosive limit (UEL) : Not available Flash point : Not available

# Safety Data Sheet

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

Auto-ignition temperature : Not available

Decomposition temperature : Not available

pH : 0 - 2

Viscosity, kinematic : Not available

Viscosity, dynamic : < 100 cP

Solubility : Dilutable in all proportions.

Partition coefficient n-octanol/water (Log Kow) : < 3

Vapour pressure Not available Vapour pressure at 50 °C : Not available : 1.31 - 1.45 g/cm<sup>3</sup> Density Relative density : Not available Relative vapour density at 20 °C : Not available Particle size : Not applicable Particle size distribution : Not applicable : Not applicable Particle shape 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

This product does not present any dangerous reactivity if used, stored and handled in accordance with this MSDS recommendations.

## 10.2. Chemical stability

Stable under normal handling and storage conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reaction known. 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

Strong bases may provoke exothermic reactions. Oxidizing materials. Explosive substances and articles.

#### 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

# Safety Data Sheet

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

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 – 2
Serious eye damage/irritation	Assumed to cause serious eye damage

pH: 0 - 2 Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified

Aluminium polychloride (1327-41-9)	
LOAEL (animal/male, F0/P)	90 mg/kg bodyweight
NOAEL (animal/male, F0/P)	90 mg/kg bodyweight

STOT-single exposure : Not classified

# Chlorhydric Acid (7647-01-0)

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure : Not classified Aspiration hazard : Not classified

# 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

: 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.

8/18 1/5/2023 (Revision date) EN (English)

# Safety Data Sheet

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

## 12.3. Bioaccumulative potential

Hyfloc FL7	
Partition coefficient n-octanol/water (Log Kow)	< 3
Bioaccumulative potential	The product is not expected to bioaccumulate.
Aluminium polychloride (1327-41-9)	
Bioaccumulative potential	not bioaccumulable.

## 12.4. Mobility in soil

Hyfloc FL7	
Mobility in soil	The product can be removed from water by abiotic process.
Ecology - soil	Depending on the pH, dissolved aluminum precipitates quickly so its impact on the environment is reduced significantly.
Aluminium polychloride (1327-41-9)	
Ecology - soil  Depending on the pH, dissolved aluminum precipitates quickly so its impact on environment is reduced significantly.	

## 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. Residues

must not be discharged into the sewage system and water conduits. Incinerate through a Licensed Site. Dispose of in accordance with Local Authority Regulations. 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.

Do not re-use. They must be eliminated as dangerous material.

# **SECTION 14: Transport information**

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

# 14.1. UN number or ID number

Additional information

 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.

1/5/2023 (Revision date) EN (English) 9/18

# Safety Data Sheet

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

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

 ${\tt CONTAINS~;~Aluminium~polychloride~;~Clorhidric~Acid~;~Chlorhydric~Acid),~8,~III,}$ 

(E)

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

Aluminium polychloride CONTAINS; Aluminium polychloride; Clorhidric Acid; Chlorhydric

Acid), 8, III

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

polychloride; Clorhidric Acid; Chlorhydric Acid), 8, III

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

Clorhidric Acid; Chlorhydric Acid), 8, III

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

Clorhidric Acid; Chlorhydric Acid), 8, III

## 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



#### 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

# Safety Data Sheet

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



## 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

Vehicle for tank carriage : AT

Transport category (ADR) : 3

Special provisions for carriage - Packages (ADR) : V12

Hazard identification number (Kemler No.) : 80

Hazard identification number (Kemler No.) : Orange plates :

80 3264

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

## Transport by sea

: 223, 274 Special provisions (IMDG) Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 P001, LP01 Packing instructions (IMDG) : IBC03 IBC packing instructions (IMDG) Tank instructions (IMDG) T7 Tank special provisions (IMDG) : TP1, TP28 EmS-No. (Fire) : F-A : S-B EmS-No. (Spillage) Stowage category (IMDG) : A Stowage and handling (IMDG) : SW2

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

# Safety Data Sheet

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

PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 856
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3
ERG code (IATA) : 8L

#### Inland waterway transport

Classification code (ADN) : C1
Special provisions (ADN) : 274
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
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
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

#### 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

# France Occupational diseases Code Description RG 66 Occupational rhinitis and asthma

## 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

# Safety Data Sheet

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

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

; N

: 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

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

Indication of changes			
Section Changed item C		Change	Comments
	Adverse health effects caused by endocrine disrupting properties	Added	
	Adverse effects on the environment caused by endocrine disrupting properties	Added	
	CSR applicable	Added	
	SDS EU format	Added	
	Supersedes	Modified	
	Revision date	Modified	
	Issue date	Modified	
3	Composition/information on ingredients	Modified	
4.3	Other medical advice or treatment	Modified	
7.1	Precautions for safe handling	Modified	
7.2	Incompatible products	Added	
8.2	Consumer exposure controls	Added	
8.2	Materials for protective clothing	Added	
8.2	Respiratory protection	Modified	
10.5	Incompatible materials	Modified	
13.1	Waste treatment methods	Modified	
16	Other information	Added	
	Exposure scenarios	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	
Met. Corr. 1 Corrosive to metals, Category 1	
Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B	
STOT SE 3 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	

# Safety Data Sheet

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

Full text of H- and EUH-statements	
H290 May be corrosive to metals.	
H314 Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

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;CN;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.

1/5/2023 (Revision date) EN (English) 14/18

# Safety Data Sheet

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

# Annex to the safety data sheet

Identified Uses	Es N°	Short title	Page
Industrial and professional use in drinking water and wastewater treatment	1		16

# Annex to the safety data sheet: Exposure scenario

Product form: Mixture Physical state: Liquid

# 1. Hyfloc FL7 - 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 FL7
ES Type: Worker
Version: 1.0

Revision date: 1/5/2023

Author: Regulatory Department Association ref code: Hyfloc FL7

Issue date: 1/5/2023

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

Worker		Use descriptors
Hyfloc FL7	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	
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

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

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 mea	
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). It is recommended to clean the equipment and lines before disconnection and/or maintenance. Filling of containers with automatic dosing systems is recommended.
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 suitable respiratory protection.	Combined gas/dust mask with filter type. A2	
Hand protection	Wear suitable gloves tested to EN374	
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	

# Annex to the safety data sheet: Exposure scenario

Product form: Mixture Physical state: Liquid

Conditions and measures related to personal protection, hygiene and health evaluation	
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