Hyfloc RJ5023

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 7/3/2023 Revision date: 6/16/2023 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : Hyfloc RJ5023

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 : Process aid industrial applications

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:
C/Plató, n 6, Entlo, 5
08021 Barcelona (Spain)
Tel. +34 93 238 9090

Manufacturing:
C/Cal Gabatx, s/n
08520 Les Franqueses del Vallès (Spain)
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)

Acute toxicity (oral), Category 4	H302
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]

Hazard pictograms (CLP) :

GHS07

Signal word (CLP) : Warning
Contains : Guanidine, cyano-,polymer with ammonium chloride and formaldehyde
Hazard statements (CLP) : H302 - Harmful if swallowed.
H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling.
EUH-statements : EUH208 - Contains Formaldehyde(50-00-0). May produce an allergic reaction.

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 product does not meet the PBT and vPvB classification criteria

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

Component	
Guanidine, cyano-,polymer with ammonium chloride and formaldehyde	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]
Guanidine, cyano-,polymer with ammonium chloride and formaldehyde	EC-No.: Polymer	45-75	Acute Tox. 4 (Oral), H302 Aquatic Chronic 3, H412
Formaldehyde substance with national workplace exposure limit(s) (ES)	CAS-No.: 50-00-0 EC-No.: 200-001-8 EC Index-No.: 605-001-00-5 REACH-no: 01-2119488953-20	< 0,1	Carc. 1B, H350 Muta. 2, H341 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Skin Sens. 1, H317

Specific concentration limits		
Name	**Product identifier**	**Specific concentration limits**
Formaldehyde	CAS-No.: 50-00-0 EC-No.: 200-001-8 EC Index-No.: 605-001-00-5 REACH-no: 01-2119488953-20	(0.2 ≤C < 100) Skin Sens. 1, H317 (5 ≤C < 100) STOT SE 3, H335 (5 ≤C < 25) Eye Irrit. 2, H319 (5 ≤C < 25) Skin Irrit. 2, H315 (25 ≤C < 100) Skin Corr. 1B, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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 : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. If skin irritation occurs: Get medical advice/attention.

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. Alternatief, onmiddellijk spoelen met Diphotérine®.

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

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

Treat symptomatically.

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

Fire hazard	:	Not expected to be a fire/explosion hazard under normal conditions of use.
Explosion hazard	:	None known.
Reactivity in case of fire	:	This product does not present any dangerous reactivity if used, stored and handled in accordance with this MSDS recommendations.
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	:	Keep away from sources of ignition.
Firefighting instructions	:	Eliminate all ignition sources if safe to do so. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection during firefighting	:	Use self-contained breathing apparatus and chemically protective clothing.
Other information	:	Spills produce extremely slippery surfaces.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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.
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.

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.
Emergency procedures	:	Stop leak if safe to do so. 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.

6.2. 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. . Avoid extremes of temperature. Heat and ignition sources.

Handling temperature : 0 – 35 °C

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 : Avoid extreme temperatures (below "Minimum temperature" and above "Maximum temperature"). Keep in a covered place, with the drum well closed and within the "Recommended temperature range".

Storage temperature : 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

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 under normal handling conditions. Use local exhaust systems in case of mists and/or aerosols. 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):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses with side-shields. Chemical goggles or face shield

8.2.2.2. Skin protection

Skin and body protection:
Safety foot-wear

Hand protection:
Chemical resistant PVC gloves (to European standard EN 374 or equivalent)

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Reusable gloves					EN ISO 374-1, EN 374-3, EN 420

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:
No respiratory protection needed under normal use conditions

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
If necessary use face mask with a filter for organic vapours	ABEK-P3		EN 405

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Appearance	:	Colourless viscous liquid.
Odour	:	Weak odour.
Odour threshold	:	Not available
Melting point	:	< 5 °C
Freezing point	:	Not available
Boiling point	:	> 100 °C
Flammability	:	Not available
Explosive properties	:	Product is not explosive.
Explosive limits	:	Not available

Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	does not ignite
Auto-ignition temperature	:	Not available
Decomposition temperature	:	> 150 °C
pH	:	3 – 6
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	10 – 400 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
Vapour pressure at 50 °C	:	Not available
Density	:	Not available
Relative density	:	1.1 – 1.3
Relative vapour density at 20 °C	:	0.804
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

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.

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

Protect from frost, heat and sunlight.

10.6. Hazardous decomposition products

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.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	:	Harmful if swallowed.

Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Testing by the inhalation route is inappropriate because human exposure by inhalation is unlikely: the substance has no vapour pressure and there is practically no exposure to inhalable aerosols.

Hyfloc RJ5023	
LD50 oral rat	1000 – 2000 mg/kg (estimated value)
LD50 dermal rat	> 5000 mg/kg (estimated value)

Guanidine, cyano-,polymer with ammonium chloride and formaldehyde	
LD50 oral rat	967 mg/kg OECD 401

Formaldehyde (50-00-0)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1.1 mg/l/4h

Skin corrosion/irritation : Not classified
pH: 3 – 6
Serious eye damage/irritation : May cause slight irritation
pH: 3 – 6
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

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) : Harmful to aquatic life with long lasting effects.

Hyfloc RJ5023	
LC50 - Fish [1]	> 10 mg/l (estimated value)
EC50 - Crustacea [1]	> 10 mg/l (estimated value)
EC50 72h - Algae [1]	Algal inhibition tests are not appropiate. The flocculating characteristics of the product inerfere directly in the test medium preventing homogenous distribution which invalides the test.

Guanidine, cyano-,polymer with ammonium chloride and formaldehyde	
LC50 - Fish [1]	10 – 100 mg/l OCDE 203
EC50 - Crustacea [1]	10 – 100 mg/l OCDE 202

Formaldehyde (50-00-0)	
LC50 - Fish [1]	100 g/l Lepomis macrochirus
EC50 - Crustacea [1]	42 mg/l Daphnia magna

Formaldehyde (50-00-0)	
NOEC chronic crustacea	6.4 mg/l daphnia magna

12.2. Persistence and degradability

Hyfloc RJ5023	
Persistence and degradability	This product is not rapidly biodegradable. This product does not hydrolyse.

Guanidine, cyano-,polymer with ammonium chloride and formaldehyde	
Persistence and degradability	Not readily biodegradable. This product does not hydrolyse.

Formaldehyde (50-00-0)	
Biodegradation	92 % (100 mg/L, 14 d)

12.3. Bioaccumulative potential

Hyfloc RJ5023	
Partition coefficient n-octanol/water (Log Pow)	< 0
Bioaccumulative potential	The product is not expected to bioaccumulate.

Guanidine, cyano-,polymer with ammonium chloride and formaldehyde	
Partition coefficient n-octanol/water (Log Pow)	< 0

Formaldehyde (50-00-0)	
Bioconcentration factor (BCF REACH)	3
Partition coefficient n-octanol/water (Log Pow)	0.35

12.4. Mobility in soil

Formaldehyde (50-00-0)	
Surface tension	0.01416 N/m (25 °C)

12.5. Results of PBT and vPvB assessment

Hyfloc RJ5023
The product does not meet the PBT and vPvB classification criteria

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : 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

12.7. Other adverse effects

No additional information available

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

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

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

14.4. Packing group

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

14.5. Environmental hazards

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

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Carc. 1B	Carcinogenicity, Category 1B
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.

Full text of H- and EUH-statements	
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains Formaldehyde(50-00-0). May produce an allergic reaction.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]		
Acute Tox. 4 (Oral)	H302	On basis of test data
Aquatic Chronic 3	H412	Calculation method

Safety Data Sheet applicable for regions : GB

Safety Data Sheet (SDS), EU

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