

# AMINOQUELANT Mn

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

### 1.1 Product identifier.

Product Name: AMINOQUELANT Mn  
 Product Code: F0453, F0865, F2751 and other codes that are being added with the same composition.  
 UFI: HQ00-X0HX-9004-30H8

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

Professional use  
 Agricultural use

### Uses advised against:

Uses other than those recommended.

### 1.3 Details of the supplier of the safety data sheet.

Company: **BIOIBERICA SAU**  
 Address: C/ Antic Camí de Tordera 109-119  
 City: 08389 - Palafolls  
 Province: Barcelona  
 Telephone: +34 937 650 390  
 Fax: +34 934 909 711  
 E-mail: reach@bioiberica.com  
 Web: www.bioiberica.com

### 1.4 Emergency telephone number:(Available 24h)

Bioiberica, SAU. \*Palafolls\* - ESPAÑA 34-93-765 03 90

Country	Link to the information	Other relevant information
Austria	<a href="https://goeg.at/Vergiftungsinformation">https://goeg.at/Vergiftungsinformation</a>	NEW <a href="https://goeg.at/viz">https://goeg.at/viz</a>
Belgium	<a href="https://www.poisoncentre.be/">https://www.poisoncentre.be/</a>	
Bulgaria	<a href="https://www.moew.government.bg/bg/prevantivna-dejnost/himichni-vestestva/klasifikaciya-clp/nacionalen-centur-po-toksikologiya/">https://www.moew.government.bg/bg/prevantivna-dejnost/himichni-vestestva/klasifikaciya-clp/nacionalen-centur-po-toksikologiya/</a>	The service is available 24/7 and the communication language is Bulgarian
Croatia	<a href="https://www.imi.hr/hr/jedinica/centar-za-kontrolu-otrovanja/">https://www.imi.hr/hr/jedinica/centar-za-kontrolu-otrovanja/</a>	Telephone no +3851 2348 342. Information available 24/7 inCroatian and English.
Cyprus	<a href="http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/44E02FF962E75D0DC2257DDA00288E83?OpenDocument">http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/44E02FF962E75D0DC2257DDA00288E83?OpenDocument</a> - Greek	Phone number: 1401
	<a href="http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/5D40BF12EB C2295BC2257E1100479BA9?OpenDocument">http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/5D40BF12EB C2295BC2257E1100479BA9?OpenDocument</a> - English	
Czech Republic	<a href="https://www.cenia.cz/odborna-podpora/reach/bezpecnostni-listy/">https://www.cenia.cz/odborna-podpora/reach/bezpecnostni-listy/</a>	
Denmark	<a href="https://www.bispebjerghospital.dk/giftlinjen/Sider/default.aspx">https://www.bispebjerghospital.dk/giftlinjen/Sider/default.aspx</a>	Danish Poison Center (Giftlinjen): +45 8212 1212
Estonia	<a href="https://www.terviseamet.ee/en/chemical-and-product-safety/data-for-safety-data-sheet">https://www.terviseamet.ee/en/chemical-and-product-safety/data-for-safety-data-sheet</a>	

**AMINOQUELANT Mn**

<b>Finland</b>	<a href="https://www.hus.fi/en/medical-care/medical-services/Poison%20Information%20Centre/Pages/default.aspx">https://www.hus.fi/en/medical-care/medical-services/Poison%20Information%20Centre/Pages/default.aspx</a>	Open 24 hours a day 0800 147 111 (the call is free of charge) 09 471 977
<b>France</b>	<a href="https://reach-info.ineris.fr/Numero_orfila">https://reach-info.ineris.fr/Numero_orfila</a>	
<b>Germany</b>	<a href="https://www.reach-clp-biozid-helpdesk.de/DE/REACH/Sicherheitsdatenblatt/Sicherheitsdatenblatt-EN/Emergency-Telephonenumber.html">https://www.reach-clp-biozid-helpdesk.de/DE/REACH/Sicherheitsdatenblatt/Sicherheitsdatenblatt-EN/Emergency-Telephonenumber.html</a>	
<b>Greece</b>	<a href="https://echa.europa.eu/documents/10162/23019181/poison_info_centre_en.pdf/58b0f281-a6f8-4362-a0b9-faad57c7fcff">https://echa.europa.eu/documents/10162/23019181/poison_info_centre_en.pdf/58b0f281-a6f8-4362-a0b9-faad57c7fcff</a>	
<b>Hungary</b>	<a href="https://www.nnk.gov.hu/index.php/kemiai-biztonsagi-es-kompetens-hatosagi-fo/egeszsegugyi-toxikologiai-tajekoztato-szolgalat">https://www.nnk.gov.hu/index.php/kemiai-biztonsagi-es-kompetens-hatosagi-fo/egeszsegugyi-toxikologiai-tajekoztato-szolgalat</a>	+36-80-201-199 (0-24h, free of charge)
<b>Iceland</b>	<a href="http://www.landspitali.is/?PageID=14556">http://www.landspitali.is/?PageID=14556</a>	
<b>Ireland</b>	<a href="https://www.poisons.ie/">https://www.poisons.ie/</a>	
<b>Italy</b>	<a href="https://preparatipericolosi.iss.it/cav.aspx">https://preparatipericolosi.iss.it/cav.aspx</a>	
<b>Latvia</b>	<a href="https://www.meteo.lv/en/lapas/environment/chemical-substances-reach/reach_en?&amp;id=1483&amp;nid=410">https://www.meteo.lv/en/lapas/environment/chemical-substances-reach/reach_en?&amp;id=1483&amp;nid=410</a>	
<b>Liechtenstein</b>	-	
<b>Lithuania</b>	<a href="http://www.apsinuodijau.lt/">http://www.apsinuodijau.lt/</a>	+370 (85) 2362052
<b>Luxembourg</b>	<a href="https://www.centreantipoisons.be/entreprises/english/how-declare/declarations-grand-duchy-luxembourg">https://www.centreantipoisons.be/entreprises/english/how-declare/declarations-grand-duchy-luxembourg</a>	(+352) 8002 5500 Free telephone number with a 24/7 access. Experts answer allurgency questions on dangerous products in French, Dutch and English.
<b>Malta</b>	<a href="https://deputyprimeminister.gov.mt/en/Pages/health.aspx">https://deputyprimeminister.gov.mt/en/Pages/health.aspx</a>	
<b>Netherlands</b>	<a href="https://www.umcutrecht.nl/nl/Subsites-nl/Nationaal-Vergiftigingen-Informatie-Centrum-(NVIC)/Productinformatie/Informationsheet-product-notification">https://www.umcutrecht.nl/nl/Subsites-nl/Nationaal-Vergiftigingen-Informatie-Centrum-(NVIC)/Productinformatie/Informationsheet-product-notification</a>	NVIC: +31 (0)88 755 8000: Only for the purpose of informing medical personnel in case of acute intoxications' or in Dutch: 'Uitsluitend bestemd om professionele hulpverleners te informeren bij acute vergiftigingen
<b>Norway</b>	<a href="https://helsenorge.no/Giftinformasjon">https://helsenorge.no/Giftinformasjon</a>	
<b>Poland</b>	-	
<b>Portugal</b>	<a href="https://www.inem.pt/category/servicos/centro-de-informacao-antivenenos/">https://www.inem.pt/category/servicos/centro-de-informacao-antivenenos/</a>	Portugal CIAV phone number: +351 800 250 250
<b>Romania</b>	-	Phone number: +40213183606
<b>Slovakia</b>	<a href="http://www.ntic.sk/ntic_en.php?adr=safetydata">http://www.ntic.sk/ntic_en.php?adr=safetydata</a>	Phone number: +421 2 5477 4166
<b>Slovenia</b>	-	Phone number: 112
<b>Spain</b>	<a href="https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/productos-quimicos/portal-reach-clp/novedades/detalle_novedades.aspx?id=tcm:30-193752-16">https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/productos-quimicos/portal-reach-clp/novedades/detalle_novedades.aspx?id=tcm:30-193752-16</a>	National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 The information will be provided in Spanish (available 24h/365days): health personnel & general public (poisoning cases)

Sweden	<a href="https://giftinformation.se/service/in-english/chemical-products---information-to-manufacturers-and-suppliers/">https://giftinformation.se/service/in-english/chemical-products---information-to-manufacturers-and-suppliers/</a>	
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**SECTION 2: HAZARDS IDENTIFICATION.****2.1 Classification of the substance or mixture.**

In accordance with Regulation (EU) No 1272/2008:

Aquatic Chronic 2 : Toxic to aquatic life with long lasting effects.

STOT RE 2 : May cause damage to organs through prolonged or repeated exposure.

**2.2 Label elements.****Labelling in accordance with Regulation (EU) No 1272/2008:**

Pictograms:



Signal Word:

**Warning**

Hazard statements:

H373 May cause damage to organs through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.

P statements:

P102 Keep out of reach of children.  
P270 Do not eat, drink or smoke when using this product.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P273 Avoid release to the environment.  
P314 Get medical advice/attention if you feel unwell.  
P391 Collect spillage.  
P501 Dispose of contents/container according to the local legislation

Contains:

manganese(2+) hydrate sulfate

**2.3 Other hazards.**

The mixture does not contain substances classified as PBT.

The mixture does not contain substances classified as vPvB.

The mixture does not contain any endocrine disrupting properties substances.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.****3.1 Substances.**

Not Applicable.

**3.2 Mixtures.**

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
CAS No: 10034-96-5	[1] [2] manganese(2+) hydrate sulfate	25 - 50 %	Aquatic Chronic 2, H411 - STOT RE 2, H373	-

(\*)The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

[1] Substance with a European Union exposure limit in the workplace (see section 8.1).

[2] Substance with a national workplace exposure limit (see section 8.1).

**SECTION 4: FIRST AID MEASURES.****4.1 Description of first aid measures.**

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

**Inhalation.**

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

**Eye contact.**

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

**Skin contact.**

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

**Ingestion.**

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

Long-term chronic exposure may result in injury to certain organs or tissues.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Keep the person comfortable. Turn him/her over to the left side and stay there while waiting for medical care.

**SECTION 5: FIREFIGHTING MEASURES.**

The product is NOT classified as flammable, in case of fire the following measures should be taken:

**5.1 Extinguishing media.****Suitable extinguishing media:**

Extinguisher powder or CO<sub>2</sub>. In case of more serious fires, also alcohol-resistant foam and water spray.

**Unsuitable extinguishing media:**

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

**5.2 Special hazards arising from the substance or mixture.****Special risks.**

Exposure to combustion or decomposition products can be harmful to your health.

**5.3 Advice for firefighters.**

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Product residues and extinguishing media may contaminate the aquatic environment.

**Fire protection equipment.**

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

**SECTION 6: ACCIDENTAL RELEASE MEASURES.****6.1 Personal precautions, protective equipment and emergency procedures.**

For exposure control and individual protection measures, see section 8.

**6.2 Environmental precautions.**

Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

**6.3 Methods and material for containment and cleaning up.**

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.

Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

**6.4 Reference to other sections.**

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

**SECTION 7: HANDLING AND STORAGE.**
**7.1 Precautions for safe handling.**

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

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

Store according to local legislation. Observe indications on the label. Store the containers in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep in its original packaging, avoiding extreme conditions of humidity and temperature. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

**7.3 Specific end use(s).**

Professional use. Agricultural use.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.**
**8.1 Control parameters.**

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m <sup>3</sup>
manganese(2+) hydrate sulfate	10034-96-5	European Union [1]	<b>Eight hours</b>		0,2 (as manganese, inhalable fraction) 0,05 (as manganese, respirable fraction)
			<b>Short term</b>		
		United States [2] (Cal/OSHA)	<b>Eight hours</b>		0.2 (as Mn)
			<b>Short term</b>		
		United States [3] (NIOSH)	<b>Eight hours</b>		1 (as Mn)
			<b>Short term</b>		3 (as Mn)
		United States [4] (OSHA)	<b>Eight hours</b>		(Ceiling) 5 (as Mn)
			<b>Short term</b>		

[1] According both Binding Occupational Exposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).

[2] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

[3] National Institute for Occupational Safety and Health. NIOSH Recommendations for occupational safety and health, Compendium of Policy Documents and Statements, January, 1992, DHHS (NIOSH) Publication No. 92-100.




# AMINOQUELANT Mn

[4] Occupational Safety and Health Administration, United States Department of Labor. Permissible Exposure limits (PELs), California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs). The product does NOT contain substances with Biological Limit Values.

## 8.2 Exposure controls.

### Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

<b>Concentration:</b>	<b>100 %</b>		
<b>Uses:</b>	<b>Agricultural use Professional use</b>		
<b>Breathing protection:</b>			
PPE:	Filter mask for protection against gases and particles.		
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.		
CEN standards:	EN 136, EN 140, EN 405		
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor. Read carefully the manufacturer's instructions regarding the equipment's use and maintenance.		
Observations:	Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.		
Filter Type needed:	A2		
<b>Hand protection:</b>			
PPE:	Protective gloves against chemicals.		
Characteristics:	«CE» marking, category III.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.		
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480
		Material thickness (mm):	0,35
<b>Eye protection:</b>			
PPE:	Protective goggles with built-in frame.		
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour.		
CEN standards:	EN 165, EN 166, EN 167, EN 168		
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.		
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.		
<b>Skin protection:</b>			
PPE:	Protective clothing.		
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.		
CEN standards:	EN 340		
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer. The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.		
Observations:			
PPE:	Work footwear.		

**AMINOQUELANT Mn**

Characteristics:	«CE» marking, category II.
CEN standards:	EN ISO 13287, EN 20347
Maintenance:	This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people.
Observations:	Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.****9.1 Information on basic physical and chemical properties.**

Physical state: Liquid

Colour: Brown

Odour: Characteristic

Odour threshold: Not applicable/Not available due to the nature/properties of the product

Melting point: Not applicable/Not available due to the nature/properties of the product

Freezing point: Not applicable/Not available due to the nature/properties of the product

Boiling point or initial boiling point and boiling range: Not applicable/Not available due to the nature/properties of the product

Flammability: Not applicable/Not available due to the nature/properties of the product

Lower explosion limit: Not applicable/Not available due to the nature/properties of the product

Upper explosion limit: Not applicable/Not available due to the nature/properties of the product

Flash point: Not applicable/Not available due to the nature/properties of the product

Auto-ignition temperature: Not applicable/Not available due to the nature/properties of the product

Decomposition temperature: Not applicable/Not available due to the nature/properties of the product

pH: 4.3 - 5.3 (100%)

Kinematic viscosity: Not applicable/Not available due to the nature/properties of the product

Solubility: Soluble

Hydrosolubility: Soluble

Liposolubility: Not applicable/Not available due to the nature/properties of the product

Partition coefficient n-octanol/water (log value): Not applicable/Not available due to the nature/properties of the product

Vapour pressure: Not applicable/Not available due to the nature/properties of the product

Absolute density: Not applicable/Not available due to the nature/properties of the product

Relative density: 1.34 - 1.40 g/mL

Relative vapour density: Not applicable/Not available due to the nature/properties of the product

Particle characteristics: Not applicable/Not available due to the nature/properties of the product

**9.2 Other information**

Viscosity: Not applicable/Not available due to the nature/properties of the product

Explosive properties: Not applicable/Not available due to the nature/properties of the product

Oxidizing properties: Not applicable/Not available due to the nature/properties of the product

Dropping point: Not applicable/Not available due to the nature/properties of the product

Blink: Not applicable/Not available due to the nature/properties of the product

**SECTION 10: STABILITY AND REACTIVITY.****10.1 Reactivity.**

The product does not present hazards by their reactivity.



**10.2 Chemical stability.**

Stable under the recommended handling and storage conditions (see section 7).

**10.3 Possibility of hazardous reactions.**

The product does not present possibility of hazardous reactions.

**10.4 Conditions to avoid.**

Avoid any improper handling.

**10.5 Incompatible materials.**

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

**10.6 Hazardous decomposition products.**

No decomposition if used for the intended uses.

**SECTION 11: TOXICOLOGICAL INFORMATION.****11.1 Information on hazard classes as defined in Regulation (EC) N° 1272/2008.****Toxicological information about the substances present in the composition.**

Name	Acute toxicity			
	Type	Test	Kind	Value
manganese(2+) hydrate sulfate  CAS No: 10034-96-5    EC No:	Oral	LD50	Rat	2150 mg/kg [1]
				[1] Indian Journal of Pharmacology. Vol. 23, Pg. 153, 1991.
	Dermal			
	Inhalation			

a) acute toxicity;

Not conclusive data for classification.

b) skin corrosion/irritation;

Not conclusive data for classification.

c) serious eye damage/irritation;

Not conclusive data for classification.

d) respiratory or skin sensitisation;

Not conclusive data for classification.

e) germ cell mutagenicity;

Not conclusive data for classification.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;  
Not conclusive data for classification.

h) STOT-single exposure;  
Not conclusive data for classification.

i) STOT-repeated exposure;  
Product classified:  
Specific target organ toxicity following a repeated exposure, Category 2: May cause damage to organs through prolonged or repeated exposure.

j) aspiration hazard;  
Not conclusive data for classification.

**11.2 Information on other hazards.**

**Endocrine disrupting properties**

This product does not contain components with endocrine-disrupting properties with effects on human health.

**Other information**

There is no information available on other adverse health effects.

**SECTION 12: ECOLOGICAL INFORMATION.**

**12.1 Toxicity.**

Name	Ecotoxicity			
	Type	Test	Kind	Value
manganese(2+) hydrate sulfate  CAS No: 10034-96-5    EC No:	Fish	LC50	Fish	130 mg/l (96 h) [1]
				[1] Lewis, M. 1978. Acute Toxicity of Copper, Zinc, and Manganese in Single and Mixed Salt Solutions to Juvenile Longfin Dace, <i>Agosia chrysogaster</i> . J.Fish Biol. 13(6):695-700
	Aquatic invertebrates	LC50	Crustaceans	17,6 mg/l (48 h) [1]
				[1] Kimball, G. 1978. The Effects of Lesser Known Metals and One Organic to Fathead Minnows ( <i>Pimephales promelas</i> ) and <i>Daphnia magna</i> . Manuscr., Dep.of Entomol., Fish.and Wildl., Univ.of Minnesota, Minneapolis, MN :88 p.
	Aquatic plants			

**12.2 Persistence and degradability.**

No information is available regarding the biodegradability of the substances present.  
No information is available on the degradability of the substances present.  
No information is available about persistence and degradability of the product.

**12.3 Bioaccumulative potential.**

No information is available regarding the bioaccumulation of the substances present.

**12.4 Mobility in soil.**

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

**12.5 Results of PBT and vPvB assessment.**

No information is available about the results of PBT and vPvB assessment of the product.

**12.6 Endocrine disrupting properties.**

This product doesn't contain components with environmental endocrine disrupting properties.

**12.7 Other adverse effects.**

No information is available about other adverse effects for the environment.

**SECTION 13: DISPOSAL CONSIDERATIONS.****13.1 Waste treatment methods.**

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

**SECTION 14: TRANSPORT INFORMATION.**

**ADR 2015 375 ESPECIAL DISPOSITION:** Substances transported in single or combined packages with a net quantity of 5 litres or less, or a net mass of 5 Kg or less will not be subject to any other provision of the ADR.

**14.1 UN number or ID number.**

ADR, IMDG, IATA: UN 3082

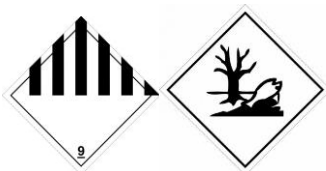
**14.2 UN proper shipping name.**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQ, N.E.P. (manganese(2+) hydrate sulfate)

**14.3 Transport Hazard class (es).**

**Class:** 9 (Miscellaneous dangerous substances and articles)

**Label:** 9

**14.4 Packing group,**

ADR, IMDG, IATA: III

**14.5 Environmental hazards.**

Yes

**14.6 Special precautions for user.****Road transport (ADR) and Rail transport (RID):**

Class: 9

Packing group: III

Classification Code: M6

Tunnel restriction code: (-)

Transport category: 3, max. ADR 1.1.3.6. 1000L

Limited quantities: 5 L (see total exemptions ADR 3.4)

Transport document: Bill of lading.

Written instructions: ADR 5.4.3.4

**Transport by sea (IMDG):**

Class: 9

Packing group: III

FEm: F-A,S-F

First Aid Guide (GPA): - -

Marine pollutant: Yes.

Transport document: Bill of lading.

**Transport by air (ICAO/IATA):**

Class: 9

Packing group: III

Transport document: Air waybill.

**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.**

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

**15.2 Chemical safety assessment.**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**SECTION 16: OTHER INFORMATION.**

Complete text of the H phrases that appear in section 3:

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Classification codes:

Aquatic Chronic 2 : Chronic effect to the aquatic environment, Category 2

STOT RE 2 : Specific target organ toxicity following a repeated exposure, Category 2

Changes regarding to the previous version:

In section 1.4 include telephones numbers/links of European anti-poisons centers.

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

Physical hazards On basis of test data

Health hazards Calculation method

Environmental hazards Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

CEN: European Committee for Standardization.

EC50: Half maximal effective concentration.

PPE: Personal protection equipment.

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2020/878.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.