TourTurf MBL ManPlex Booster Liquid + LPT

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

1.1 Product identifier: TourTurf MBL ManPlex Booster Liquid + LPT

Other means of identification:

UFI: FQ41-E0SG-600Q-K95V

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

Relevant uses: Fertilizer. For professional users only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

E.Marker A/S
Okslundvej 8
DK-6330
Padborg,Denmark
Tel: +45 74 67 08 08 Fax: +45 79 30 41 90 Email: info@emarker.dk

1.4 Emergency telephone number: +45 74 67 08 08

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Eye Irrit. 2: Eye irritation, Category 2, H319
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317
STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2, H373

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Warning

Hazard statements:

Aquatic Chronic 3: Harmful to aquatic life with long lasting effects.
Eye Irrit. 2: Causes serious eye irritation.
Skin Sens. 1A: May cause an allergic skin reaction.
STOT RE 2: May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

Wash thoroughly after handling.
Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.
IF ON SKIN: Wash with plenty of water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Supplementary information:

Contains Thyme, Thymus zygis, ext..

Substances that contribute to the classification

manganese sulphate · (H2O); 2-methylisothiazol-3(2H)-one

UFI: FQ41-E0SG-600Q-K95V

2.3 Other hazards:

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of inorganic substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 10034-96-5 EC: 232-089-9 Index: Non-applicable REACH: 01-2119456624-35-XXXX	**manganese sulphate · (H2O)(1)**	Self-classified	**5 - <25 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; STOT RE 2: H373 - Warning	
CAS: 68515-73-1 EC: 500-220-1 Index: Non-applicable REACH: 01-2119488530-36-XXXX	**D-Glucopyranose, oligomers, decyl octyl glycosides(1)**	Self-classified	**1 - <5 %**
	Regulation 1272/2008	Eye Dam. 1: H318 - Danger	
CAS: 8007-46-3 EC: 285-397-0 Index: Non-applicable REACH: 01-2120768771-44-XXXX	**Thyme, Thymus zygis, ext.(1)**	Self-classified	**<0.3 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Corr. 1C: H314; Skin Sens. 1: H317 - Danger	
CAS: 2682-20-4 EC: 220-239-6 Index: 613-326-00-9 REACH: 01-2120764690-50-XXXX	**2-methylisothiazol-3(2H)-one(1)**	ATP ATP13	**<0.3 %**
	Regulation 1272/2008	Acute Tox. 2: H330; Acute Tox. 3: H301+H311; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1A: H317; EUH071 - Danger	

(1) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	M-factor	
2-methylisothiazol-3(2H)-one	Acute	10
CAS: 2682-20-4 EC: 220-239-6	Chronic	1

Identification	Specific concentration limit
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	% (w/w) >=0.0015: Skin Sens. 1A - H317

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
Thyme, Thymus zygis, ext.	LD50 oral	1800 mg/kg	Rat
CAS: 8007-46-3	LD50 dermal	Not relevant	
EC: 285-397-0	LC50 inhalation	Not relevant	
2-methylisothiazol-3(2H)-one	LD50 oral	120 mg/kg	Rat
CAS: 2682-20-4	LD50 dermal	242 mg/kg	Rat
EC: 220-239-6	LC50 inhalation	Not relevant	

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply,etc.) requiring immediate medical assistance.

By skin contact:

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SECTION 4: FIRST AID MEASURES (continued)

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

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

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Minimum Temp.: 5 ºC

Maximum Temp.: 30 ºC

Maximum time: 24 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be assessed in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

Identification	Occupational exposure limits		
manganese sulphate · (H2O)	WEL (8h)		0.05 mg/m³
CAS: 10034-96-5 EC: 232-089-9	WEL (15 min)		

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
manganese sulphate · (H2O)	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 10034-96-5	Dermal	Not relevant	Not relevant	0.004 mg/kg	Not relevant
EC: 232-089-9	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
D-Glucopyranose, oligomers, decyl octyl glycosides	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 68515-73-1	Dermal	Not relevant	Not relevant	595000 mg/kg	Not relevant
EC: 500-220-1	Inhalation	Not relevant	Not relevant	420 mg/m³	Not relevant
2-methylisothiazol-3(2H)-one	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 2682-20-4	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 220-239-6	Inhalation	Not relevant	0.043 mg/m³	Not relevant	0.021 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
manganese sulphate · (H2O)	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 10034-96-5	Dermal	Not relevant	Not relevant	0.002 mg/kg	Not relevant
EC: 232-089-9	Inhalation	Not relevant	Not relevant	0.043 mg/m³	Not relevant
D-Glucopyranose, oligomers, decyl octyl glycosides	Oral	Not relevant	Not relevant	35.7 mg/kg	Not relevant
CAS: 68515-73-1	Dermal	Not relevant	Not relevant	357000 mg/kg	Not relevant
EC: 500-220-1	Inhalation	Not relevant	Not relevant	124 mg/m³	Not relevant
2-methylisothiazol-3(2H)-one	Oral	0.053 mg/kg	Not relevant	0.027 mg/kg	Not relevant
CAS: 2682-20-4	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 220-239-6	Inhalation	Not relevant	0.043 mg/m³	Not relevant	0.021 mg/m³

PNEC:

Identification				
manganese sulphate · (H2O)	STP	56 mg/L	Fresh water	0.03 mg/L
CAS: 10034-96-5	Soil	25.1 mg/kg	Marine water	0 mg/L
EC: 232-089-9	Intermittent	0.088 mg/L	Sediment (Fresh water)	0.011 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.001 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	STP	560 mg/L	Fresh water	0.176 mg/L
CAS: 68515-73-1	Soil	0.654 mg/kg	Marine water	0.018 mg/L
EC: 500-220-1	Intermittent	0.27 mg/L	Sediment (Fresh water)	1.516 mg/kg
	Oral	0.11111 g/kg	Sediment (Marine water)	0.152 mg/kg
2-methylisothiazol-3(2H)-one	STP	0.23 mg/L	Fresh water	0.00339 mg/L
CAS: 2682-20-4	Soil	0.047 mg/kg	Marine water	0.00339 mg/L
EC: 220-239-6	Intermittent	0.00339 mg/L	Sediment (Fresh water)	Not relevant
	Oral	Not relevant	Sediment (Marine water)	Not relevant

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	CE CAT III	EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.11 mm)	CE CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield	CE CAT II	EN 166:2002 UNE-EN ISO 18526-1 al 4:2020 UNE-EN ISO 18526-1 al 4:2020 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks	CE CAT III	EN 13034:2005+A1:2009 UNE-EN ISO 18526-1 al 4:2020 EN ISO 13982-1:2005/A1:2011 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1995	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk	CE CAT III	EN ISO 20345:2022 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Not available
Colour:	Brown
Odour:	Undefined
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	Not relevant *
Vapour pressure at 20 ºC:	Not relevant *
Vapour pressure at 50 ºC:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Evaporation rate at 20 ºC:	Not relevant *
Product description:	
Density at 20 ºC:	Not relevant *
Relative density at 20 ºC:	1.19 - 1.21
Dynamic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 40 ºC:	Not relevant *
Concentration:	Not relevant *
pH:	4.6 - 5.6
Vapour density at 20 ºC:	Not relevant *
Partition coefficient n-octanol/water 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *
Flammability:	
Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	Not relevant *
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *
Particle characteristics:	
Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *
Other safety characteristics:	
Surface tension at 20 ºC:	Not relevant *
Refraction index:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

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SECTION 10: STABILITY AND REACTIVITY (continued)

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: Mixture based on inorganic substances.

SECTION 11: TOXICOLOGICAL INFORMATION

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

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Not relevant
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
manganese sulphate · (H2O)	LD50 oral	>2000 mg/kg	Rat
CAS: 10034-96-5	LD50 dermal		
EC: 232-089-9	LC50 inhalation		
Thyme, Thymus zygis, ext.	LD50 oral	1800 mg/kg	Rat
CAS: 8007-46-3	LD50 dermal		
EC: 285-397-0	LC50 inhalation		
2-methylisothiazol-3(2H)-one	LD50 oral	120 mg/kg	Rat
CAS: 2682-20-4	LD50 dermal	242 mg/kg	Rat
EC: 220-239-6	LC50 inhalation		

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Harmful to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
manganese sulphate · (H2O)	LC50	>1 - 10 mg/L (96 h)		Fish
CAS: 10034-96-5	EC50	>1 - 10 mg/L (48 h)		Crustacean
EC: 232-089-9	EC50	>1 - 10 mg/L (72 h)		Algae
D-Glucopyranose, oligomers, decyl octyl glycosides	LC50	126 mg/L (96 h)	Brachydanio rerio	Fish
CAS: 68515-73-1	EC50	151 mg/L (48 h)	Acartia tonsa	Crustacean
EC: 500-220-1	EC50	27 mg/L (72 h)	Scenedesmus subspicatus	Algae
Thyme, Thymus zygis, ext.	LC50	>1 - 10 mg/L (96 h)		Fish
CAS: 8007-46-3	EC50	>1 - 10 mg/L (48 h)		Crustacean
EC: 285-397-0	EC50	>1 - 10 mg/L (72 h)		Algae
2-methylisothiazol-3(2H)-one	LC50	4.77 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 2682-20-4	EC50	0.934 mg/L (48 h)	Daphnia magna	Crustacean
EC: 220-239-6	EC50	Not relevant		

Chronic toxicity:

Identification	Concentration		Species	Genus
D-Glucopyranose, oligomers, decyl octyl glycosides	NOEC	1.8 mg/L	Danio rerio	Fish
CAS: 68515-73-1 EC: 500-220-1	NOEC	2 mg/L	Daphnia magna	Crustacean
2-methylisothiazol-3(2H)-one	NOEC	4.93 mg/L	Oncorhynchus mykiss	Fish
CAS: 2682-20-4 EC: 220-239-6	NOEC	0.044 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
D-Glucopyranose, oligomers, decyl octyl glycosides	BOD5	Not relevant	Concentration	Not relevant
CAS: 68515-73-1	COD	Not relevant	Period	28 days
EC: 500-220-1	BOD5/COD	Not relevant	% Biodegradable	100 %
2-methylisothiazol-3(2H)-one	BOD5	Not relevant	Concentration	10 mg/L
CAS: 2682-20-4	COD	Not relevant	Period	28 days
EC: 220-239-6	BOD5/COD	Not relevant	% Biodegradable	55.8 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
2-methylisothiazol-3(2H)-one	BCF	
CAS: 2682-20-4	Pow Log	-0.49
EC: 220-239-6	Potential	

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
D-Glucopyranose, oligomers, decyl octyl glycosides	Koc	50	Henry	1.2E-8 Pa·m³/mol
CAS: 68515-73-1	Conclusion	Very High	Dry soil	No
EC: 500-220-1	Surface tension	Not relevant	Moist soil	No
2-methylisothiazol-3(2H)-one	Koc	Not relevant	Henry	0E+0 Pa·m³/mol
CAS: 2682-20-4	Conclusion	Not relevant	Dry soil	Not relevant
EC: 220-239-6	Surface tension	Not relevant	Moist soil	Not relevant

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
06 10 02*	wastes containing hazardous substances	Hazardous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC, The Waste Regulations 2011, 2011 No. 988). As under 15 01 (2014/955/EU) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

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SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains 1,2-benzisothiazol-3(2H)-one, bronopol (INN), 2-methylisothiazol-3(2H)-one, Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).
- Article 95, REGULATION (EU) No 528/2012: *2-methylisothiazol-3(2H)-one (2682-20-4) - PT: (6,11,12,13)*
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Not relevant

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885
Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits
The Waste Regulations 2011, 2011 No. 988
Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products.

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Not relevant

Texts of the legislative phrases mentioned in section 2:

H317: May cause an allergic skin reaction.
H373: May cause damage to organs through prolonged or repeated exposure.
H412: Harmful to aquatic life with long lasting effects.
H319: Causes serious eye irritation.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

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SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 2: H330 - Fatal if inhaled.
Acute Tox. 3: H301+H311 - Toxic if swallowed or in contact with skin.
Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Eye Dam. 1: H318 - Causes serious eye damage.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

Classification procedure:

Skin Sens. 1A: Calculation method
STOT RE 2: Calculation method
Aquatic Chronic 3: Calculation method
Eye Irrit. 2: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

- END OF SAFETY DATA SHEET -