

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

1.1. Product identifier

Trade name : XSILEM PLUS
 Product form : Mixture
 Type (Nufarm) : Third Party
 CA Code (Nufarm) : 3P0358
 Product code : 3P0358
 Oracle Recipe Code (Nufarm) : OR3P0358
 Item codes : IC3P0358 AFRICA (MA,KE,TN)

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

1.2.1. Relevant identified uses

Main use category : Professional use
 Use of the substance/mixture : Fertilisers

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Nufarm S.A.S
 Immeuble WEST PLAZA
 11 rue du débarcadère
 92700 COLOMBES - FRANCE
 T +33 1 40 85 50 50 - F +33 1 47 92 25 45
FDS@nufarm.com

1.4. Emergency telephone number

Emergency number : Organisme français INRS +33 1 45 42 59 59; Nufarm S.A.S +33 1 40 85 51 15

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
 Serious eye damage/eye irritation, Category 1 H318
 Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
 Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411
 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye damage. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS09

GHS07

Signal word (CLP) :

Danger

Contains :

Zinc chloride; Mangan(II)-sulfat-Monohydrat; Orthosilicic acid

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Hazard statements (CLP)	: H315 - Causes skin irritation. H318 - Causes serious eye damage. H400 - Very toxic to aquatic life. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P264 - Wash hands, forearms and face thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear protective gloves, eye protection, face protection. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor. P321 - Specific treatment (see supplemental first aid instruction on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P391 - Collect spillage. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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 substance(s) are 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 at a concentration equal to or greater than 0,1 %.

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]
calcium chloride substance with national workplace exposure limit(s) (CZ, LV)	(CAS-No.) 10043-52-4 (EC-No.) 233-140-8 (EC Index-No.) 017-013-00-2 (REACH-no) 01-2119494219-28	25-50%	Eye Irrit. 2, H319
zinc chloride substance with national workplace exposure limit(s) (BE, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, PL, PT, SE)	(CAS-No.) 7646-85-7 (EC-No.) 231-592-0 (EC Index-No.) 030-003-00-2 (REACH-no) 01-2119472431-44	2.5-5%	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Manganese sulfate monohydrate	(CAS-No.) 10034-96-5 (EC-No.) 232-089-9;600-072-9 (REACH-no) 01-2119456624-35	≤2.5%	Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Chronic 2, H411
Silicic acid (H4SiO4)	(CAS-No.) 10193-36-9 (EC-No.) 233-477-0 (REACH-no) 01-2120871273-54	≤2.5%	Skin Corr. 1A, H314

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits
zinc chloride	(CAS-No.) 7646-85-7 (EC-No.) 231-592-0 (EC Index-No.) 030-003-00-2 (REACH-no) 01-2119472431-44	(5 ≤ C ≤ 100) STOT SE 3; H335

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Immediately remove any clothing soiled by the product. Take affected persons out of danger area and lay down.
- First-aid measures after inhalation : Remove the victim to fresh air and keep him/her at rest in a position that facilitates breathing. In case of unconsciousness place patient stably in side position for transportation.
- First-aid measures after skin contact : Take off contaminated clothing immediately and wash the skin with plenty of water (possibly showering). If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, consult a specialist.
- First-aid measures after ingestion : Rinse out mouth and then drink plenty of water. Get medical advice/attention if you feel unwell.

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

No additional information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use fire extinguishing methods suitable to surrounding conditions. All extinguishing media are possible.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Protection during firefighting : Wear a self contained breathing apparatus.
- Other information : Cool containers / tanks with spray water if possible.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Wear protective equipment. Keep unprotected people away. Avoid inhalation of vapours. Avoid contact with skin, eyes and clothing.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

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6.2. Environmental precautions

Do not allow to enter drains or water courses. Notify authorities if product enters sewers or public waters. Dilute remainder with plenty of water.

6.3. Methods and material for containment and cleaning up

For containment : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.

6.4. Reference to other sections

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid breathing vapours. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Ensure good ventilation of the work station.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Storage must comply with the local regulations. Store in cool, dry conditions in well sealed receptacles.
Information on mixed storage : Store away from foodstuffs.
Storage area : All hazardous products must be placed above a sump pallet.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

calcium chloride (10043-52-4)	
Czech Republic - Occupational Exposure Limits	
Local name	Chlorid vápenatý
PEL (OEL TWA)	2 mg/m ³
NPK-P (OEL C)	4 mg/m ³
Remark	I - dráždí sliznice (oči, dýchací cesty), resp. kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 20/2025 Sb.)
Latvia - Occupational Exposure Limits	
Local name	Kalcija hlorīds
OEL TWA	2 mg/m ³
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2024. gada 26. martā noteikumiem Nr. 191).

zinc chloride (7646-85-7)

Belgium - Occupational Exposure Limits	
Local name	Zinc (chlorure de) (fumées) # Zinkchloride (rook)
OEL TWA	1 mg/m ³

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zinc chloride (7646-85-7)	
OEL STEL	2 mg/m ³
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Croatia - Occupational Exposure Limits	
Local name	Cinkov klorid, dim
GVI (OEL TWA)	1 mg/m ³
KGVI (OEL STEL)	2 mg/m ³
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 148/2023)
Czech Republic - Occupational Exposure Limits	
Local name	Chlorid zinečnatý
PEL (OEL TWA)	1 mg/m ³
NPK-P (OEL C)	2 mg/m ³
Remark	I - dráždí sliznice (oči, dýchací cesty), resp. kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 20/2025 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Zinkchlorid og zinkchloridrøg
OEL TWA	0.5 mg/m ³ beregnet som Zn
Regulatory reference	BEK nr 1619 af 19/12/2024
Estonia - Occupational Exposure Limits	
Local name	Tsinkkloriid
OEL TWA	1 mg/m ³ peentolm (respireeritav fraktsioon)
Remark	1 (Peentolm koosneb alla 2,5-mikromeetrise läbimõõduga osakestest, mis võivad koos sissehingatava õhuga jõuda kopsualveoolidesse)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 02.04.2024, 13)
Finland - Occupational Exposure Limits	
Local name	Sinkkikloridi, huurut
HTP (OEL TWA)	1 mg/m ³
Regulatory reference	HTP-ARVOT 2025 (Sosiaali- ja terveystieteiden ministeriö)
France - Occupational Exposure Limits	
Local name	Zinc (chlorure de, fumées) (Chlorure de zinc)
VME (OEL TWA)	1 mg/m ³
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 6443, 2022; Outil65)
Greece - Occupational Exposure Limits	
Local name	Ψευδάργυρος χλωριούχος (καπνοί)
OEL TWA	1 mg/m ³
OEL STEL	2 mg/m ³
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους

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zinc chloride (7646-85-7)	
Hungary - Occupational Exposure Limits	
Local name	CINK-KLORID (Zn-re számítva)
AK (OEL TWA)	1 mg/m ³ respirábilis frakció
Remark	i (ingerlő anyag, amely izgatja a bőrt, nyálkahártyát, szemet vagy mindhármát); N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
Local name	Zinc chloride, fume
OEL TWA	1 mg/m ³
OEL STEL	2 mg/m ³
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
Lithuania - Occupational Exposure Limits	
Local name	Cinko chloridas
IPRV (OEL TWA)	1 mg/m ³ (alveolinė frakcija)
Remark	O (medžiaga į organizmą gali prasiskverbti pro nepažeistą odą)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Poland - Occupational Exposure Limits	
Local name	Dichlorek cynku
NDS (OEL TWA)	1 mg/m ³ frakcja wdychalna
NDSCh (OEL STEL)	2 mg/m ³ frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikażąca przez nos i usta, która stwarza zagrożenie dla zdrowia po zdeponowaniu w drogach oddechowych.
Regulatory reference	Dz. U. 2024 poz. 1017 wraz z późn. zm.
Portugal - Occupational Exposure Limits	
Local name	Cloreto de zinco, fumos
OEL TWA	1 mg/m ³
OEL STEL	2 mg/m ³
Regulatory reference	Norma Portuguesa NP 1796:2014
Spain - Occupational Exposure Limits	
Local name	Cloruro de cinc
VLA-ED (OEL TWA)	1 mg/m ³ humos
VLA-EC (OEL STEL)	2 mg/m ³ humos
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2025. INSHT
Sweden - Occupational Exposure Limits	
Local name	Zinkklorid
NGV (OEL TWA)	1 mg/m ³ (respirabel fraktion)

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zinc chloride (7646-85-7)	
Remark	25 (Med inhalerbar och respirabel fraktion menas de dammfraktioner som definieras i svensk standard SS-EN 481, Arbetsplatsluft – Partikelstorleksfraktioner för mätning av luftburna partiklar (utgåva 1, 1993). Med totaldamm menas de partiklar (aerosoler) som fastnar på ett filter i en totaldammprovtagare)
Regulatory reference	Arbetsmiljöverkets föreskrifter och allmänna råd (AFS 2023:14) om gränsvärden för luftvägsexponering i arbetsmiljön
United Kingdom - Occupational Exposure Limits	
Local name	Zinc chloride
WEL TWA (OEL TWA)	1 mg/m ³ fume
WEL STEL (OEL STEL)	2 mg/m ³ fume
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Sínkkloríð og sínkkloríðreykur, sem Zn
OEL TWA	0.5 mg/m ³
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Sinkklorid
Grenseverdi (OEL TWA)	1 mg/m ³
Regulatory reference	FOR-2024-04-05-581
Switzerland - Occupational Exposure Limits	
Local name	Chlorure de zinc (fumée) / Zinkchlorid (Rauch)
MAK (OEL TWA)	1 mg/m ³ (a) / (a)
Remark	OSHA
Regulatory reference	www.suva.ch, 01.01.2025

Manganese sulfate monohydrate (10034-96-5)	
Finland - Occupational Exposure Limits	
Local name	Mangaani-(II)-sulfaatti, monohydraatti
HTP (OEL TWA)	0.02 mg/m ³ (respirable dust)
Regulatory reference	HTP-ARVOT 2025 (Sosiaali- ja terveystieteiden ministeriö)

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

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Minimise exposure using measures such as contained and enclosed systems, properly designed and maintained dedicated facilities and suitable general/local exhaust ventilation.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:			
Type	Field of application	Characteristics	Standard
Safety glasses		With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:
According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn. EN 14605

Hand protection:					
Wear suitable gloves resistant to chemical penetration					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.4		EN ISO 374-1/A1 , EN 16523+A1 (type A)
Reusable gloves	Chloroprene rubber (CR)	6 (> 480 minutes)	0.5		EN ISO 374-1/A1 , EN 16523+A1 (type A)
Reusable gloves	Butyl rubber	6 (> 480 minutes)	0.7		EN ISO 374-1/A1 , EN 16523+A1 (type A)
Disposable gloves					EN ISO 374-1/A1 , EN ISO 374-2 (A,B, or C type)

Other skin protection		
Materials for protective clothing:		
Condition	Material	Standard
According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn		EN 14605

8.2.2.3. Respiratory protection

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Respiratory protection:

Users are advised to consider national Occupational Exposure Limits or other equivalent values. Ensure exposure is below occupational exposure limits (where available).

Device	Filter type	Condition	Standard
respirator with combination filter for vapour/particles	ABEK	In case of inadequate ventilation wear respiratory protection.	EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke during use. Keep away from children. Remove contaminated clothing. Separate working clothes from town clothes. Wash contaminated clothing before reuse. Wash hands immediately after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: According to product specification.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not applicable
Auto-ignition temperature	: Not self-igniting
Decomposition temperature	: Not available
pH	: 2.5 – 5
Viscosity, kinematic	: Not available
Solubility	: Water: completely miscible
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 23 hPa @20°C; (7732-18-5 Water, distilled, conductivity or of similar purity)
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
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

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9.2.2. Other safety characteristics

water : 36.7 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No decomposition if stored and handled properly.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

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LD50 oral rat	2759 mg/kg
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calcium chloride (10043-52-4)

LD50 oral	1000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit

Skin corrosion/irritation	: Causes skin irritation. pH: 2.5 – 5
Serious eye damage/irritation	: Causes serious eye damage. pH: 2.5 – 5
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

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Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

Silicic acid (H₄SiO₄) (10193-36-9)

NOAEL (animal/male, F0/P) > 9.76 mg/kg bodyweight Animal: , Animal sex: male

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

Manganese sulfate monohydrate (10034-96-5)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Silicic acid (H₄SiO₄) (10193-36-9)

NOAEL (subchronic, oral, animal/male, 90 days) > 227 mg/kg bodyweight Animal: , Animal sex: male

NOAEL (subchronic, oral, animal/female, 90 days) > 237 mg/kg bodyweight Animal: , Animal sex: female

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects 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 substance(s) are 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 at a concentration equal to or greater than 0,1 %

11.2.2 Other information

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

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Additional ecotoxicological information

calcium chloride (10043-52-4)

LC50 96h fish 4630 mg/l Test organisms (species): Pimephales promelas

LOEC (chronic) 240 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

NOEC (chronic) 481 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

NOEC chronic fish 230 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '25 d'

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

Silicic acid (H4SiO4) (10193-36-9)	
LC50 96h fish	2320 mg/l Test organisms (species):
LC50 96h fish	2320 mg/l Test organisms (species): Gambusia affinis
EC50 72h algae	207 mg/l Test organisms (species): Scenedesmus sp.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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 substance(s) are 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 at a concentration equal to or greater than 0,1 %

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Do not remove as household garbage. Do not allow product to reach the sewage system.
Additional information : Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3264	UN 3264	UN 3264	UN 3264	UN 3264
14.2. UN proper shipping name				
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ZINC CHLORIDE)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ZINC CHLORIDE)	Corrosive liquid, acidic, inorganic, n.o.s. (ZINC CHLORIDE)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ZINC CHLORIDE)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ZINC CHLORIDE)

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Transport document description (ADR)				
UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ZINC CHLORIDE), 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ZINC CHLORIDE), 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (ZINC CHLORIDE), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ZINC CHLORIDE), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ZINC CHLORIDE), 8, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
8	8	8	8	8
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
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 (ADR) : TP1, TP28
- Tank code (ADR) : L4BN
- Tank special provisions (ADR) : TU42
- Vehicle for tank carriage : AT
- Transport category (ADR) : 3
- Special provisions for carriage - Packages (ADR) : V12
- Hazard identification number (Kemler No.) : 80
- Orange plates :



- Tunnel restriction code (ADR) : E
- EAC code : 2X

Transport by sea

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

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EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW2
Segregation (IMDG) : SGG1, SG36, SG49
Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y841
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 852
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 856
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3, A803
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 (RID) : TP1, TP28
Tank codes for RID tanks (RID) : L4BN
Special provisions for RID tanks (RID) : TU42
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

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 substance(s) listed on REACH Annex XVII (Restriction Conditions)
Contains no substance(s) listed on the REACH Candidate List
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

15.1.2. National regulations

No ICPE	Installations classées Désignation de la rubrique	Code Régime	Rayon
4511.text	Dangereux pour l'environnement aquatique de catégorie chronique 2.		

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4511.1	La quantité totale susceptible d'être présente dans l'installation étant : 1. Supérieure ou égale à 200 t Quantité seuil bas au sens de l'article R. 511-10 : 200 t. Quantité seuil haut au sens de l'article R. 511-10 : 500 t.	A	1
4511.2	La quantité totale susceptible d'être présente dans l'installation étant : 2. Supérieure ou égale à 100 t mais inférieure à 200 t Quantité seuil bas au sens de l'article R. 511-10 : 200 t. Quantité seuil haut au sens de l'article R. 511-10 : 500 t.	DC	

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Manganese sulfate monohydrate is listed

SZW-lijst van mutagene stoffen : Manganese sulfate monohydrate is listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

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

Switzerland

Storage class (LK) : LK 8 - Corrosive materials

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

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Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

NUFARM SDS TEMPLATE

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.