

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

#### 1.1. Product identifier

Product form	: Article
Trade name	: Fertigro Sil
EC-No.	: 215-199-1
CAS-No.	: 1312-76-1
REACH registration No	: 01-2119456888-17
Product code	: 74315
Formula	: HKO3Si

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use

##### 1.2.2. Uses advised against

No additional information available

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

Breustedt Chemie B.V.  
IJsseldijk 28  
7325 WZ Apeldoorn - Nederland  
T 055-5332844  
[strijker@breustedt.nl](mailto:strijker@breustedt.nl) - [www.breustedt.nl](http://www.breustedt.nl)

#### 1.4. Emergency telephone number

Emergency number : +31(0)653244323 Breustedt Chemie

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Not classified

##### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H314 - Causes severe skin burns and eye damage.  
H290 - May be corrosive to metals.

Precautionary statements (CLP) :

P262 - Do not get in eyes, on skin, or on clothing.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301 - IF SWALLOWED: Rinse mouth, Do NOT induce vomiting.  
P303 - IF ON SKIN (or hair): Take off immediately all contaminated clothing, Rinse skin with water/shower.  
P305 - IF IN EYES: Rinse cautiously with water for several minutes, Remove contact lenses, if present and easy to do. Continue rinsing.

#### 2.3. Other hazards

No additional information available

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### 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]
Potassium metasilicate	(CAS-No.) 1312-76-1 (EC-No.) 215-199-1	50	Not classified

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse immediately with plenty of water. Get medical advice/attention.  
First-aid measures after ingestion : Immediately after ingestion: give lots of water to drink. Do not induce vomiting because of corrosive effects.

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

Symptoms/effects after skin contact : Irritation. Burns.  
Symptoms/effects after eye contact : Permanent eye damage.  
Symptoms/effects after ingestion : Burns.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Warning! Product may cause floors to be slippery.

##### 6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

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Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.  
Incompatible products : Strong acids.  
Incompatible materials : Metals. aluminium.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Fertigro Sil (1312-76-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1.49 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5.61 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.74 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1.38 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.74 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	7.5 mg/l
PNEC aqua (marine water)	1 mg/l

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Materials for protective clothing:

Condition	Material	Standard
Good resistance:		EN ISO 13982, EN 14605

#### Hand protection:

Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	PVC gloves, Nitrile rubber (NBR)	6 (> 480 minutes)			EN 374

#### Eye protection:

Safety glasses

Type	Use	Characteristics	Standard
Safety glasses			EN 166

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Personal protective equipment symbol(s):



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### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Colourless.
Odour	: odourless.
Odour threshold	: No data available
pH	: Strong Base
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ≈ 1.61 g/ml
Solubility	: Insoluble in: Water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### Silika 50% (1312-76-1)

LD50 oral rat	1280 mg/kg
LD50 dermal rat	1280 mg/kg

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<b>Silika 50% (1312-76-1)</b>	
LC50 inhalation rat (mg/l)	> 2.06 mg/l/4h

Skin corrosion/irritation	: Not classified pH: Strong Base
Serious eye damage/irritation	: Not classified pH: Strong Base
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

<b>Fertigro Sil (1312-76-1)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	> 159 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	> 159 mg/kg bodyweight

Reproductive toxicity : Not classified

<b>Fertigro Sil (1312-76-1)</b>	
LOAEL (animal/male, F0/P)	159 mg/kg bodyweight
LOAEL (animal/female, F0/P)	195 mg/kg bodyweight

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

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

<b>Fertigro Sil (1312-76-1)</b>	
LC50 fish 1	146 mg/l
EC50 Daphnia 1	146 mg/l
EC50 72h algae (1)	35 mg/l

### 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

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW) code	: 06 02 99 - wastes not otherwise specified

## SECTION 14: Transport information






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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
1719	1719	1719	1719	1719
<b>14.2. UN proper shipping name</b>				
CAUSTIC ALKALI LIQUID, N.O.S.	CAUSTIC ALKALI LIQUID, N.O.S.	Caustic alkali liquid, n.o.s.	CAUSTIC ALKALI LIQUID, N.O.S.	CAUSTIC ALKALI LIQUID, N.O.S.

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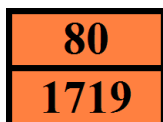
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

ADR	IMDG	IATA	ADN	RID
<b>Transport document description</b>				
UN 1719 CAUSTIC ALKALI LIQUID, N.O.S., 8, II, (E)	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S., 8, II	UN 1719 Caustic alkali liquid, n.o.s., 8, II	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S., 8, II	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S., 8, II
<b>14.3. Transport hazard class(es)</b>				
8	8	8	8	8
				
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : C5  
 Special provisions (ADR) : 274  
 Limited quantities (ADR) : 11  
 Excepted quantities (ADR) : E2  
 Packing instructions (ADR) : P001, IBC02  
 Mixed packing provisions (ADR) : MP15  
 Portable tank and bulk container instructions (ADR) : T11  
 Portable tank and bulk container special provisions (ADR) : TP2, TP27  
 Tank code (ADR) : L4BN  
 Vehicle for tank carriage : AT  
 Transport category (ADR) : 2  
 Hazard identification number (Kemler No.) : 80  
 Orange plates :



Tunnel restriction code (ADR) : E  
 EAC code : 2R

#### - Transport by sea

Special provisions (IMDG) : 274  
 Packing instructions (IMDG) : P001  
 IBC packing instructions (IMDG) : IBC02  
 Tank instructions (IMDG) : T11  
 Tank special provisions (IMDG) : TP2, TP27  
 EmS-No. (Fire) : F-A  
 EmS-No. (Spillage) : S-B  
 Stowage category (IMDG) : A  
 Segregation (IMDG) : SG22, SG35  
 Properties and observations (IMDG) : Reacts violently with acids. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes.

#### - Air transport

PCA Excepted quantities (IATA) : E2  
 PCA Limited quantities (IATA) : Y840  
 PCA limited quantity max net quantity (IATA) : 0.5L

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PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3
ERG code (IATA)	: 8L

### - Inland waterway transport

Classification code (ADN)	: C5
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0

### - Rail transport

Classification code (RID)	: C5
Special provisions (RID)	: 274
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T11
Portable tank and bulk container special provisions (RID)	: TP2, TP27
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE6
Hazard identification number (RID)	: 80

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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 on the REACH candidate list

#### 15.1.2. National regulations

##### Germany

Reference to AwSV	: Water hazard class (WGK) 1, low hazard to waters (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige 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
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### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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### SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

SDS EU (REACH Annex II)

*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*