



**Safety Data Sheet  
VitaLink Silicon MAX**

**Date: 23.07.2015  
Revision Date: N/A  
Version: 2**

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

**1.1 Product Identifier**

**Substance or preparation trade name:** VitaLink Silicon MAX  
**REACH Registered number(s):** N/A  
**CAS number:** N/A  
**EINECS number:** N/A  
**Synonyms:** N/A

**1.2 Relevant identified use of the substance or mixture and uses advised**

**Use of substance/mixture:** Silicon MAX is a highly-concentrated silicon additive. Use throughout growth cycle. Use alongside main nutrient. Do not use product undiluted.

**1.3 Company/undertaking name and address:**

**Company Name:** Hydrogarden  
Unit 2 Progress Way  
Binley  
Coventry  
CV3 2NT  
Telephone: +44(0)2476 651500  
Fax: +44(0) 2476 651060  
E-mail: [info@hydrogarden.co.uk](mailto:info@hydrogarden.co.uk)

**1.4 Emergency telephone number:**

**Emergency telephone number:** +44 (0) 2476651500

**Opening hours:** 8.30am -5.00pm Mon-Thurs, 8.30am - 4.00pm Fri.

## SECTION 2: Hazards Identification

### 2.1 Classification of the substance or mixture

#### 2.1.1 classification according to Regulation (EC) No 1272/2008 (CLP):

Skin Corrosive Cat 1

#### 2.1.2 Classification according to Directive 67/548/EEC (See SECTION 16 for full text of risk phrases)

Irritant Xi,

#### 2.1.3 Additional information:

H314: Causes severe skin burns and eye damage.

R36/37/38: Irritating to eyes, respiratory system and skin

R41: Risk of serious damage to eyes.

For full text of R-phrases and Hazard and EU hazard statements see SECTION 16.

### 2.2 Label Elements

#### Label elements under CLP:

**Hazard Statements:**H314: Causes severe skin burns and eye damage

**Signal Words:** Danger

#### Hazard Pictograms:



**Precautionary Statements:**

P260: Do not breathe fumes

P264: Wash hands thoroughly after handling

P280: Wear protective gloves/protective clothing/face protection/eye protection

P405: Store locked up

P501: Dispose of contents/containers to an approved (in accordance with local and national regulations) waste disposal site.

**Precautionary Statement Response:**

P301/330/331 – IF SWALLOWED: Rinse mouth, DO NOT induce vomiting.

P303/361/353 – IF ON SKIN (or HAIR): Remove immediately all contaminated clothing. Rinse skin with water.

P363: Wash contaminated clothing before re use.

P304/340: IF INHALED: remove victim to fresh air and keep at rest in a comfortable position for breathing.

P310: Immediately call a POISON centre or doctor.

P321: Specific treatment – see first aid information on this label.

P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**2.3 Other Hazards**

**Supplemental hazard information:** Not applicable

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

**Substance or preparation trade name:** VitaLink Silicon MAX.

**Description of the mixture:** Potassium silicate solution

**Hazardous Ingredients:** Potassium silicate

Name	Cas No	EC No	Reach Registration No.	% (weight)	Classification according to 67/548/EEC	Classification according to Regulation EC No 1278/2008 (CLP)
Potassium Silicate	1312-76.1	/	/	40-45 %	Xi, Irritant R36/37/38: Irritating to eyes, respiratory system and skin R41: Risk of serious damage to eyes.	Skin Corrosive Cat 1 H314 Causes severe skin burns and eye damage

**% Contents:**

Potassium (K <sub>2</sub> O) (water soluble)	6 %
Dissolved Silicon	6 %

**Content of Hazardous Elements Declaration for Czech Republic:**

All hazardous elements are below the limits specified (Cadmium <1 mg/kg, Arsenic <10mg/kg, Chromium <50mg/kg, Lead <10 mg/kg and Mercury <1 mg/kg).

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

**General notes:**

**Following Skin contact:** IMMEDIATELY IRRIGATE WITH CLEAN WATER. Remove immediately all contaminated clothing. Rinse skin with water. If irritation persists seek medical attention.

**Following Eye contact:** IMMEDIATELY IRRIGATE WITH EYEWASH OR CLEAN WATER FOR 15 MINS. Cold water must be used. Seek medical aid. Remove contact lenses if present and easy to do so. Continue rinsing

**Following Ingestion:** Rinse mouth. Never give anything by mouth to unconscious person. Do not induce vomiting. Immediately call a POISON centre or doctor.

**Following Inhalation:** remove victim to fresh air and keep at rest in a comfortable position for breathing.

**Self –protection of the first aider:** Advise to wear gloves to avoid skin contact whilst treating patient.

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

**Delayed/immediate effects:** the immediate effects are burns and irritation to skin and eyes.

#### 4.3 Indication of any immediate medical attention/special treatment

**Immediate/special treatment:** See first aid treatment in section 4.1. No special treatment required.

### SECTION 5: Fire fighting measures

#### 5.1 Extinguishing media

**Extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

**Exposure Hazards:** Hazardous decomposition products formed under fire conditions. - Potassium oxides, silicon oxides.

#### 5.3 Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus for firefighting if necessary.

### SECTION 6: Accidental release measures

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

##### 6.1.1 for non-emergency personnel:

**Personal Precautions:** Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

**Protective equipment:** wear gloves and goggles/safety glasses in case of splashes.

**Emergency procedures:** do not allow the liquid to enter drains or water courses.

#### **6.1.2 for emergency responders:**

**Advice for fire fighters:** Wear self-contained breathing apparatus for firefighting if necessary.

### **6.2 Environmental precautions**

**Environmental precautions:** do not allow the liquid to enter drains or water courses.

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

**6.3.1 Methods for spill containment:** Store in a bunded area, cover nearby drains

**6.3.2 Clean-up procedures:** Absorb onto sand, earth or other suitable absorbent material.

### **6.4 References to other sections**

**Reference to other sections:** refer to section 8 of SDS.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

**Protective measures:** wear gloves and goggles in case of splashes

**Measures to prevent fire:** not applicable

**Measures to prevent aerosol and dust generation:** not applicable

**Measures to protect the environment:** do not allow to enter drains or water courses.

**Advice on general occupational hygiene:** prevent contact with eyes, skin and clothing. Wash hands after handling.

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

**Storage conditions:** store between 5-25°C and away from direct sunlight. Keep out of reach of children.

**Suitable packaging:** store in original packaging only.

**Storage class:** n/a

**Further information on storage conditions:** none

### 7.3 Specific end use(s)

**Recommendations:** Dose: 1 ml/L. Shake well before use. Silicon MAX is a highly-concentrated silicon additive which is strongly alkaline, you should add it to the water first, mix, then add your nutrients.

You may need to bring the pH down before adding your base nutrients and additives, as Silicon MAX can raise the pH. Adjust the pH using VitaLink Essentials pH Down. When topping up nutrient solution, dilute well in water before adding to existing solution.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

Employ good industrial hygiene practice.

**Hazardous ingredients:** Potassium Silicate

**Workplace exposure limits:** no data available

### 8.2 Exposure controls

**8.2.1 Engineering measures:** none required

**Mixture related measures to prevent exposure during identified uses:** n/a

**8.2.2 Personal protective equipment:**

**Respiratory protection:** not applicable

**Hand protection:** gloves

**Eye protection:** safety glasses or goggles

**Skin protection:** gloves/long sleeves

**8.2.3 Environmental exposure controls:** do not allow spills to enter drains. Use bunding or store away from drains.

**Mixture related measures to prevent exposure:** no specific measures for mixtures.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance:** clear and colourless

**State:** liquid

**Odour:** none

**pH:** 11.5-11.7

**Melting/freezing point:** unknown

**Boiling point:** unknown

**Flash point:** unknown

**Evaporation rate:** unknown

**Flammability:** not flammable

**Vapour pressure:** unknown

**Vapour density:** unknown

**Relative density:** 1.14 g/cm<sup>3</sup>

**Viscosity:** unknown

**Oxidising properties:** unknown

**Explosive properties:** unknown

**Solubility in water:** soluble

### 9.2 Other information

**Other information:** no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

**Reactivity:** no data available

### 10.2 Chemical stability



**Chemical stability:** Under storage at normal ambient temperatures (7-30°C) the product is stable.

### 10.3 Possibility of hazardous reactions

**Hazardous reactions:** No data available.

### 10.4 Conditions to avoid

**Conditions to avoid:** Low or high temperatures may impair the product. Store between 5-25°C and out of direct sunlight.

### 10.5 Incompatible materials

**Materials to avoid:** strong oxidizing agents.

### 10.6 Hazardous decomposition products

**Hazardous decomposition products:** refer to section 5.2

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute Toxicity:** no toxic effects

**Irritation:** not toxic, irritation may occur

**Corrosivity:** no toxic effects

**Sensitization:** not toxic, irritation may occur

**Repeated dose toxicity:** no toxic effects

**Mutagenicity:** no toxic effects

**Carcinogenicity:** no toxic effects

**Reproductive toxicity:** not a known reproductive toxin.

## SECTION 12: Ecological information

**Ecotoxicity values:** no specific information available

## 12.2 Persistence and degradability

**Persistence and degradability:** biologically degradable

## 12.3 Bioaccumulative potential

**Bioaccumulative potential:** ingredients not bioaccumulative

## 12.4 Mobility in soil

**Mobility:** no specific data available

## 12.5 Results of PBT and vPvB assessment

**PBT identification:** This substance is not identified as a PBT or vPvB substance.

## 12.6 Other adverse effects

**Other adverse effects:** none known

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

**13.1.1 Product/packaging disposal:** Dispose of packaging and contents in accordance with local/national regulations

**Waste codes/waste designations according to LoW:** None

**13.1.2 Waste treatment – relevant information:** dispose of at local waste disposal site in accordance with local regulations.

**13.1.2 Sewage disposal – relevant information:** waste should not be released to sewers.

**13.1.4 Other disposal recommendations:** none

## SECTION 14: Transport information

### 14.1 UN number

**UN number:** 1760

### 14.2 UN proper shipping name

**Shipping name:** CORROSIVE LIQUID, N.O.S

### 14.3 Transport hazard class(es)

**Transport class:** 8

### 14.4 Packing group

**Packing group:** II

### 14.5 Environmental hazards

**Environmentally hazardous:** Not classified as environmentally hazardous.

**Marine Pollutant:** Not a marine pollutant

### 14.6 Special precautions for user

**Special precautions:** none

**Tunnel code:** not applicable

**Transport category: 2**

## **SECTION 15: Regulatory information**

### **15.1 Safety, health and Environmental regulations/legislation specific for the mixture**

**EU regulations:** none

**Authorisations and/or restrictions on use:** not applicable

**Specific regulations:** none

### **15.2 Chemical safety assessment**

**Chemical safety assessment:** a COSHH assessment has been carried out for the substance or mixture by the supplier

## **SECTION 16: Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No

453/2010 and EC Regulation No 1272/2008.

MSDS Sheet used for Information from Sigma Aldrich, Product Number CDS001237, Potassium Silicate.

\*Indicates text in the SDS which has been changed since the last revision

### **Phrases used in Section 2 and Section 3:**

H314: Causes severe skin burns and eye damage.

R36/37/38: Irritating to eyes, respiratory system and skin

R41: Risk of serious damage to eyes.

### **Precautionary Statements:**

P260: Do not breathe fumes

P264: Wash hands thoroughly after handling

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P405: Store locked up

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**Legal Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall only be used as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.