



**Safety Data Sheet**  
**VitaLink pH UP (50%)**

Date: 23.05.2016  
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 pH UP (50%)  
**REACH Registered number(s):** N/A  
**CAS number:** 1310-58-3  
**EINECS number:** 215-181-3  
**Synonyms:** Potassium hydroxide, caustic potash.

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

**Use of substance/mixture:** Potassium Hydroxide solution used to adjust pH of hydroponic nutrient feed solutions after nutrient has been added.

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

**Company Name:** Hydrogarden Wholesales Ltd  
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):

Corrosive to metals (Category 1), H290

Acute toxicity, Oral (Category 4), H302

Skin corrosion (Category 1A), H314

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

C Corrosive R35

Xn Harmful R22

#### 2.1.3 Additional information:

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:

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

**Signal Words:** Danger

**Hazard Pictograms:** N/A

DANGER



**Precautionary Statements:**

P264: Wash thoroughly after handling.

P260: Do not breathe fumes

P270: Do not eat, drink or smoke when using this product.

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

P301 +310: 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 reuse

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/ physician.

P304 + 340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P321: Specific treatment (see First Aid Measures on this label)

P405: Store locked up

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

**2.3 Other Hazards****Supplemental hazard information:** Not applicable**SECTION 3: Composition/information on ingredients****3.1 Substances****Substance trade name:** VitaLink pH UP. 50% Potassium Hydroxide.

Name	Cas No	EC No	Reach Registration No.	% (weight)	Classification according to 67/548/EEC	Classification according to Regulation EC No 1278/2008 (CLP)
<b>Potassium Hydroxide</b>	1310-58-3	215-181-3	/	40-45 %	C Corrosive R35 Xn Harmful R22	Corrosive to metals (Category 1), H290 Acute toxicity, Oral (Category 4), H302 Skin corrosion (Category 1A), H314

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

#### General notes:

**Following Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. IMMEDIATELY IRRIGATE WITH CLEAN WATER for at least 10 minutes. 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.

**Following Ingestion:** SEEK MEDICAL ATTENTION DISPLAY LABEL WHERE POSSIBLE. Never give anything by mouth to unconscious person. Do not induce vomiting.

**Self –protection of the first aider:** Wear gloves to avoid skin contact whilst treating patient. Avoid inhalation of chemical.

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

#### Delayed/immediate effects:

Skin contact: Severe burns may occur.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Severe burns to digestive tract. Ingestion may prove fatal.

Inhalation: May cause burns/ irritation to the respiratory system.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

**Immediate/special treatment:** See first aid treatment in section 4.1. Speed is of the essence when dealing with highly corrosive chemicals.

## SECTION 5: Fire fighting measures

### 5.1 Extinguishing media

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

**Unsuitable extinguishing media:** not applicable

## 5.2 Special hazards arising from the substance or mixture

**Exposure Hazards:** Potassium oxides may be produced in a fire.

## 5.3 Advice for fire-fighters

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

# SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

**6.1.1 for non-emergency personnel:**

**Personal Precautions:** ensure gloves and goggles are worn during clean up.

**Protective equipment:** gloves and goggles.

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

**6.1.2 for emergency responders:**

**Advice for fire fighters:** none

## 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. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

**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 in cool place and away from direct sunlight. Keep out of reach of children. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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

**Storage class:** Corrosive Storage.

**Further information on storage conditions:** sensitive to carbon dioxide.

### 7.3 Specific end use(s)

**Recommendations:** Potassium Hydroxide solution used to adjust pH of hydroponic nutrient feed solutions after nutrient has been added. Use a pH meter, test strips or indicator solution to determine the pH of the solution. Add small amounts of pH Up or pH Down to the nutrient tank. Mix thoroughly, re-test and repeat as necessary

## SECTION 8: Exposure controls/personal protection

## 8.1 Control Parameters

Employ good industrial hygiene practice.

Hazardous Ingredients: Potassium Hydroxide

**Workplace exposure limits:** STEL 2 mg/m<sup>3</sup> UK (EH40 WEL – Workplace)

## 8.2 Exposure controls

**8.2.1 Engineering measures:** Ensure there is sufficient ventilation of the area.

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

### 8.2.2 Personal protective equipment:

**Respiratory protection:** not applicable

**Hand Protection:** glove (alkali resistant)

**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.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance:** clear

**State:** liquid

**Odour:** unknown.

**pH:** >11.5

**Melting/freezing point:** unknown

**Boiling point:** unknown

**Flash point:** unknown

**Evaporation rate:** unknown

**Flammability:** not flammable

**Vapour pressure:** unknown

**Vapour density:** unknown

**Relative density:** 1.515 g/cm<sup>3</sup>

**Viscosity:** unknown  
**Oxidising properties:** unknown  
**Explosive properties:** unknown  
**Solubility in water:** soluble

## 9.2 Other information

**Other information:** None

## 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, Acids, Metals, Chlorinated hydrocarbons.



## 10.6 Hazardous decomposition products

**Hazardous decomposition products:** Potassium oxides. In combustion emits corrosive and irritating fumes.

## 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, highly corrosive

**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.

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

## SECTION 12: Ecological information

### 12.1 Toxicity

**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:** The high pH will have an adverse effect on the aquatic environment.

## 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:** UN1814

### 14.2 UN proper shipping name

**Shipping name:** POTASSIUM HYDROXIDE SOLUTION

**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:** E

**Transport category:** 2

**SECTION 15: Regulatory information**

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

**EU regulations:** not applicable

**Authorisations and/or restrictions on use:** none

**Specific regulations:** not applicable

**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 for Potassium Hydroxide 45% Solution from Sigma Aldrich,  
Product Number: 03564.

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

**Phrases used in Section 2 and Section 3:** none.

R22: Harmful if swallowed.

R35: Causes severe burns

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

### **Precautionary Statements:**

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P270: Do not eat, drink or smoke when using this product.

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

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Remove

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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.