



# SAFETY DATA SHEET

Issuing Date: 29-Feb-2016

Version 1

## pH Up

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** pH Up  
**Product code** PHU2X1G  
**Product Use** Plant Nutrient.

**Supplier Address**  
 Dutch Master Nutrients LLC  
 PO Box 4125  
 Bellevue, WA 98009

**SDSs are available at the following website(s):** [www.dutchmasternutrients.com](http://www.dutchmasternutrients.com)

**Company Phone Number** 425-505-2973

**Emergency Telephone** Transport-CHEMTREC Inside NA: 800-424-9300  
 Transport CHEMTREC Outside NA: 703-527-3887

**E-mail** [sds@dutchmasternutrients.com](mailto:sds@dutchmasternutrients.com)

### 2. HAZARDS IDENTIFICATION

#### Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

#### GHS Label elements, including precautionary statements

Danger

#### **Hazard Statements**

Harmful if swallowed  
 Causes severe skin burns and eye damage  
 May be corrosive to metals



### **Precautionary Statements**

#### **Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Keep only in original container

#### **Response**

Immediately call a POISON CENTER or doctor/physician  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 Do NOT induce vomiting  
 Absorb spillage to prevent material damage

#### **Storage**

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

#### **Hazards not otherwise classified (HNOC)**

Not classified

#### **Other hazards**

Harmful to aquatic life

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Chemical Name</b>	<b>CAS No</b>	<b>Weight-%</b>
POTASSIUM HYDROXIDE	1310-58-3	20-40%

### **4. FIRST AID MEASURES**

#### **First aid measures for different exposure routes**

##### **General advice**

If symptoms persist, call a physician.

##### **Eye contact**

In case of contact with substance, immediately flush eyes with running water for at least 30 minutes. Keep eye wide open while rinsing. Do not rub affected area. Call a physician immediately.

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<b>Skin contact</b>	Wash off immediately with plenty of water for at least 30 minutes. Remove contaminated clothing and shoes. Call a physician immediately.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.

**Most important symptoms/effects, acute and delayed**

Burning feeling and temporary redness.

**Indication of immediate medical attention and special treatment needed, if necessary**

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

None known.

**Specific hazards arising from the chemical**

None known.

**Hazardous Combustion Products**

Potassium oxides. Carbon oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** none

**Sensitivity to Static Discharge** none

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use personal protective equipment. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take up mechanically, placing in appropriate

containers for disposal. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Store in original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
POTASSIUM HYDROXIDE	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	

### Exposure controls

**Engineering Measures**                      Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection**                      Tightly fitting safety goggles. Face-shield.

**Skin and body protection**                      Wear protective gloves/clothing.

**Respiratory protection**                      If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**                      When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, Colorless	<b>Odor</b>	none
<b>Odor Threshold</b>	Not available	<b>Physical State @20°C</b>	Aqueous Solution
<b>pH</b>	> 13	<b>Molecular Weight</b>	Not available
<b>Specific Gravity</b>	1.3	<b>Autoignition temperature</b>	Not available
<b>Flash point</b>	> 201 °F / > 94 °C	<b>Boiling point / boiling range</b>	> 212 °F / > 100 °C
<b>Decomposition temperature</b>	Not available	<b>Freezing Point</b>	Not available
<b>Melting point / melting range</b>	Not available		
<b>Flammability Limit in Air</b>	Not available		
<b>Oxidizing Properties</b>	Not available	<b>Explosive Properties</b>	Not available
<b>Solubility</b>	completely soluble	<b>Partition coefficient</b>	Not available
<b>Evaporation rate</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor density</b>	Not available	<b>Density</b>	Not available
<b>VOC (lb/gal)</b>	Not available	<b>VOC (g/l)</b>	Not available
<b>Dynamic viscosity</b>	Not available		

## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under recommended storage conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Excessive heat. Freezing.

### Incompatible Materials

Strong oxidizing agents. Strong acids. Metals.

### Hazardous Decomposition Products

None known.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

#### **Acute toxicity**

##### **Inhalation**

Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause additional affects as listed under "Ingestion".

##### **Eyes**

Causes burns. Risk of serious damage to eyes.

##### **Skin**

Causes burns.

##### **Ingestion**

Ingestion causes burns of the upper digestive and respiratory tracts. Can burn mouth, throat, and stomach.

#### Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
POTASSIUM HYDROXIDE	214 mg/kg ( Rat )		

### Information on toxicological effects

No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### **Irritation**

Causes severe irritation and or burns.

#### **Corrosivity**

Corrosive to skin. Corrosive to eyes.

#### **Sensitization**

No information available.

#### **Mutagenic Effects**

No information available.

#### **Reproductive Toxicity**

No information available.

#### **Carcinogenicity**

None known.

#### **STOT - single exposure**

No information available.

<b>STOT - repeated exposure</b>	No information available.
<b>Target Organ Effects</b>	Eyes, Respiratory system, Skin, Gastrointestinal tract (GI).
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1568 mg/kg mg/l

ATE: Acute toxicity estimate

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Contains no substances known to be hazardous to the environment or that are not degradable in wastewater treatment plants.

**Persistence and degradability**

No information available.

**Bioaccumulation**

Chemical Name	Octanol Water Partition Coefficient (log pow)
POTASSIUM HYDROXIDE	0.65
	0.83

**Mobility**

No information available.

**Other adverse effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods**

Dispose of in accordance with local regulations.

**Contaminated packaging**

Do not re-use empty containers.

<b>14. TRANSPORT INFORMATION</b>
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**DOT**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Reportable Quantity (RQ)</b>	(Potassium hydroxide: RQ (kg)= 454.00)
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II
<b>Emergency Response Guide Number</b>	154
<b>Packaging Exceptions</b>	154
<b>Non-bulk Packaging</b>	202
<b>Bulk Packaging</b>	242

**TDG**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**MEX**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**ICAO**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**IATA**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**IMDG**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>EmS-No</b>	F-A, S-B
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**ADR/RID**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

<b>Classification Code</b>	C5
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II
<b>ADR/RID-Labels</b>	8

**ADN**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Classification Code</b>	C5
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II
<b>Hazard Labels</b>	8
<b>Limited quantity</b>	1 L

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Yes
<b>DSL/NDL</b>	Yes
<b>PICCS</b>	Yes
<b>EINECS/ELINCS</b>	Yes
<b>ENCS</b>	Yes
<b>IECSC</b>	Yes
<b>KECL</b>	Yes
<b>AICS</b>	Yes

**\*Yes - All component(s) of this product are included or are exempt from listing on the inventory.**

**\*No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations****TSCA Sections 4, 5 and 12(b)**

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	no
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):.



Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
POTASSIUM HYDROXIDE	1000 lb			X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
POTASSIUM HYDROXIDE	1000		RQ 1000 lb final RQ RQ 454 kg final RQ

**U.S. State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
POTASSIUM HYDROXIDE	X	X	X		X

**International Regulations**

**Canada - NDSL**

This product does not contain any NDSL chemicals.

**Mexico - Grade**

Slight risk, Grade 1

**Mexico - Carcinogen Status and Exposure Limits**

No information available

**Other Regulations**

No information available

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazard 3</b>	<b>Flammability 1</b>	<b>Instability 0</b>	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard 3</b>	<b>Flammability 1</b>	<b>Physical Hazard 0</b>	<b>Personal protection C</b>

**Prepared By** FUJIFILM Environment, Health and Safety, phone: 800-473-3854

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**Revision Note** No information available

**Disclaimer** **The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

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