



SAFETY DATA SHEET

Issuing Date: 29-Feb-2016

Version 1

pH Down

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name pH Down
Product code PHD2X1G
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

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

2. HAZARDS IDENTIFICATION

Classification

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

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



Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 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: 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

May be harmful if swallowed

Unknown Acute Toxicity

6.4005% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
PHOSPHORIC ACID	7664-38-2	30-50%

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.

Skin contact

Wash off immediately with plenty of water for at least 30 minutes. Remove contaminated

clothing and shoes. Call a physician immediately.

Inhalation 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.

Ingestion 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

Carbon oxides. Phosphorus 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
PHOSPHORIC ACID	STEL: 3 mg/m ³ TWA: 1 mg/m ³	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ (vacated) STEL: 3 mg/m ³	IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³	

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

Appearance	Clear, Colorless	Odor	none
Odor Threshold	Not available	Physical State @20°C	Aqueous Solution
pH	< 1	Molecular Weight	Not available
Specific Gravity	1.2	Autoignition temperature	Not available
Flash point	> 201 °F / > 94 °C	Boiling point / boiling range	> 212 °F / > 100 °C
Decomposition temperature	Not available	Freezing Point	Not available
Melting point / melting range	Not available		
Flammability Limit in Air	Not available		
Oxidizing Properties	Not available	Explosive Properties	Not available
Solubility	completely soluble	Partition coefficient	Not available
Evaporation rate	Not available	Vapor Pressure	Not available
Vapor density	Not available	Density	Not available
VOC (lb/gal)	Not available	VOC (g/l)	Not available
Dynamic viscosity	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 bases. 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)
PHOSPHORIC ACID	= 1530 mg/kg (Rat)	2730 mg/kg (Rabbit)	850 mg/m ³ (Rat) 1 h

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 eyes. Corrosive to skin.

Sensitization

No information available.

Mutagenic Effects

No information available.

Reproductive Toxicity

No information available.

Carcinogenicity

None known.

STOT - single exposure

No information available.

STOT - repeated exposure	No information available.
Target Organ Effects	Eyes, Respiratory system, Skin, Gastrointestinal tract (GI).
Aspiration hazard	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)	4218 mg/kg
ATEmix (dermal)	7555 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

No information available.

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.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID)
UN/ID No	UN3264
Packing Group	II
Reportable Quantity (RQ)	(Phosphoric acid: RQ (kg)= 2270.00)
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s (PHOSPHORIC ACID), 8, II
Emergency Response Guide Number	154
Packaging Exceptions	154
Non-bulk Packaging	202
Bulk Packaging	242

TDG

Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID)
UN/ID No	UN3264
Hazard Class	8
Packing Group	II
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID), 8, II

MEX

Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID)
UN/ID No	UN3264
Hazard Class	8
Packing Group	II
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID), 8, II

ICAO

Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID)
UN/ID No	UN3264
Hazard Class	8
Packing Group	II
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID), 8, II

IATA

Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID)
UN/ID No	UN3264
Hazard Class	8
Packing Group	II
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID), 8, II

IMDG

Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID)
UN/ID No	UN3264
Hazard Class	8
Packing Group	II
EmS-No	F-A, S-B
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s (PHOSPHORIC ACID), 8, II

ADR/RID

Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID)
UN/ID No	UN3264
Hazard Class	8
Packing Group	II
Classification Code	C1

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID), 8, II
ADR/RID-Labels 8

ADN

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID)
UN/ID No UN3264
Hazard Class 8
Packing Group II
Classification Code C1
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID), 8, II
Hazard Labels 8
Limited quantity 1 L

15. REGULATORY INFORMATION

International Inventories

TSCA Yes
DSL/NDSL Yes
PICCS Yes
EINECS/ELINCS Yes
ENCS Yes
IECSC Yes
KECL Yes
AICS 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/NDSL - 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

Acute Health Hazard Yes
Chronic Health Hazard no
Fire Hazard no
Sudden Release of Pressure Hazard no
Reactive Hazard 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	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous
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	Quantities			Substances
PHOSPHORIC ACID	5000 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
PHOSPHORIC ACID	5000		RQ 5000 lb final RQ RQ 2270 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
PHOSPHORIC ACID	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

Chemical Name	Carcinogen Status	Exposure Limits
PHOSPHORIC ACID		Mexico: TWA 1 mg/m ³ Mexico: STEL 3 mg/m ³

Other Regulations

No information available

16. OTHER INFORMATION

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

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

Revision Date 29-Feb-2016

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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