



MATERIAL SAFETY DATA SHEET

MSDS DATE: 05 /03 /2017

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: pH Down
PRODUCT CODES: 3000

MANUFACTURER: TNB Naturals
ADDRESS: #1A 4601 23rd St.
Vernon, B.C. Canada V1T 4K7

TELEPHONE NUMBER: 1-888-543-8988
EMERGENCY PHONE: 1-888-543-8988
CHEMTREC PHONE: N/A
FAX PHONE: 778-475-0517

PRODUCT USE: Indoor garden
PREPARED BY: TNB Naturals

SECTION 1 NOTES: All natural ingredient

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS: Citric Acid Anhydrous (Y)

<u>CAS NO</u>	<u>% WT</u>	<u>% VOL</u>
	<u>ppm</u>	<u>mg/m3</u>

SECTION 2 NOTES: Not a food product;

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause respiratory tract, digestive tract, eye and skin burns. Fine dust clouds may form explosive mixtures with air. Corrosive to the eyes, skin, respiratory system and digestive tract. Causes burns. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose, throat. Keep away from heat, sparks and flame. Prevent dust accumulation. Do not breathe dust. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

ROUTES OF ENTRY: Container opening

POTENTIAL HEALTH EFFECTS

EYES: Corrosive to eyes. Causes burns.

SKIN: Corrosive to the skin. Causes burns.

INGESTION: Corrosive to the digestive tract. Causes burns.

INHALATION: Causes to the respiratory system.

ACUTE HEALTH HAZARDS: No acute health hazards.

CHRONIC HEALTH HAZARDS: No chronic health hazards.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

SECTION 3 NOTES: Seek medical attention from a doctor if you feel the product is causing any irritation or discomfort to your health.



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SECTION 4: FIRST AID MEASURES

EYES: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

INGESTION: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

INHALATION: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt, or waistband. Get medical attention immediately.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 4 NOTES: Seek medical attention from a doctor if you feel the product is causing any irritation to your health.

SECTION 5: FIRE-FIGHTING MEASURES

METHOD USED: Water spray, fire extinguisher, dry chemical powder or appropriate foam

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is adequate. Put on appropriate personal protective equipment.

ENVIRONMENTAL PRECAUTIONS: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

METHODS FOR CLEANING: Move containers from spill area. Vacuum, or sweep up material and place in a designated, labeled waste container. Dispose of via licensed waste disposal contractor.

SECTION 7: HANDLING AND STORAGE

HANDLING: Put on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where the material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

STORAGE: Stored in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environment contamination.



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

No exposure limit value known.
Consult local authorities for acceptable exposure limits.

RECOMMENDED MONITORING PROCEDURES: if this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or the other control measure and/or the necessity to use respiratory protective equipment.

ENGINEERING MEASURES: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

HYGIENE MEASURES: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and use the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

PERSONAL PROTECTION

RESPIRATORY: Use a properly fitter, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid (powder or granules)

COLOR: White

ODOR: Odorless

MOLECULAR WEIGHT: 192.12 g/mole

MOLECULAR FORMULA: C₆H₈O₇

pH: 2.2 to 2.5 [Conc. (% w/w): 5]

MELTING/FREEZING POINT: Decomposition temperature: 153°C (307.4°F)

RELATIVE DENSITY: 1.665 [@ 20°C]

SOLUBILITY: Soluble in the following materials: cold water

SECTION 10: STABILITY AND REACTIVITY

STABILITY: The product is stable

HAZARDOUS POLYMERIZATION: Under normal conditions of storage and use, hazardous polymerization will not occur.

CONDITIONS TO AVOID: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

MATERIALS TO AVOID: Copper, zinc, aluminum, and their alloys, bases, oxidizing agents, reducing agents.

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



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SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Product/ingredient name	Result	Species	Dose	Exposure
Citric Acid	LD50 Oral	Rat	11700 mg/kg	-
	LD50 Oral	Mouse	5040 mg/kg	-

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS: Readily biodegradable

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environment protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

TDG CLASSIFICATION: Not regulated

SECTION 15: REGULATORY INFORMATION

WHIMIS (CANADA): Class E: Corrosive material

CANADA INVENTORY: All ingredients are listed or exempted.

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

REGULATORY AFFAIRS DEPARTMENT: 1 800 665 6553

NOTICE TO READER: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.