

Material Safety Data Sheet

SECTION 1 - IDENTIFICATION OF PREPARATION

Product name:

Genesis Formula pH Raise

Item ID:

PHR

Application:

Hydroponic Solutions

Manufacturer Identification:

Green Air Products, Inc.
PO Box 1318
Gresham, OR 97030

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical composition:

Potassium Hydroxide - ~50%

Chemical Information:

CAS No.: 1310-58-3, EINECS: 215-181-3
NIOSH-REL: 2mg/m3 Ceiling
ACGIH-TLV: 2 mg/m3 Ceiling

SECTION 3 - HAZARD IDENTIFICATION/HEALTH EFFECTS

Undiluted material is highly corrosive to any tissue with which it comes in contact. Will produce burns, deep ulcerations and gelatinous necrotic areas at the site of contact.

SWALLOWED:

Highly corrosive. Swallowing may cause severe burns to the mouth, throat and stomach. Severe tissue scarring and/or death may occur. Symptoms include bleeding, vomiting and diarrhea.

EYE:

Corrosive to eyes. Causes severe eye irritation. Contact can result in severe burns which may result in permanent impairment of vision and even blindness.

SKIN:

Corrosive to skin. Contact with skin may cause irritation or severe burns and scarring.

INHALED:

Severe irritant. Mist may cause mild irritation to serious damage of the respiratory tract. Symptoms may include sneezing, sore throat or runny nose.

CARCINOGENICITY:

This material is not listed (IARC, NTP, OSHA) as cancer causing agent.

SECTION 4 - FIRST AID MEASURES

SWALLOWED:	If conscious, immediately rinse mouth with water and give water to drink. DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Seek immediate medical attention.
EYE:	Immediately irrigate with copious quantities of water for at least 15 minute with eyelids held open. Seek immediate medical attention.
SKIN:	Remove contaminated clothing. Wash affected areas with large amount of water. If irritation develops seek immediate medical attention.
INHALED:	Remove victim from exposure. Remove contaminated clothing. Allow victim to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing is labored, ensure airways are clear and administer oxygen. If breathing has stopped, administer artificial respiration immediately. Seek immediate medical attention.
CONTACT PHYSICIAN IMMEDIATELY:	Treat symptomatically as indicated for exposure to strong alkalis.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABILITY:	Not flammable. Not a fire hazard. May liberate flammable Hydrogen (H) gas on contact with certain metals such as Aluminum (Al).
EXTINGUISHING MEDIA:	Hot or molten material can react violently with water. Use extinguishing media appropriate for surrounding fire - foam, carbon dioxide or dry chemical powder. Firefighters should wear self contained breathing apparatus and full protective clothing when fighting fire.
HAZARDOUS DECOMPOSITION MATERIALS:	Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

In case of accidental spill or release:	Slippery when wet. Wear proper protective equipment. Respiratory protection is required in misty environments. Use absorbent material such as sand, earth, inert clays or other inert materials or vermiculite. With a clean shovel, transfer spilled material into clean-labeled containers for disposal. Prevent from entering drains, sewers, spillways, streams, or other bodies of water. If contamination of sewers or waterways has occurred, advise local emergency services immediately.
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SECTION 7 - HANDLING AND STORAGE

HANDLING:

Do not breathe vapor. Do not get in eyes, on skin or on clothing. Wear protective equipment as indicated.

STORAGE:

Store in a cool, well-ventilated place away from sources of heat, moisture or incompatible materials. Store away from acids and Ammonium salts. Do not store in Aluminum or galvanized containers. Do not use die cast Zinc or Aluminum in conjunction with this material.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Provide local and/or general exhaust ventilation to keep exposure level below the OSHA standard. Local exhaust ventilation is preferred because it can control the emissions of the contaminants at its source preventing its dispersion into the general work area.

PERSONAL PROTECTION:

Avoid skin and eye contact and inhalation of mist. Wear overalls, safety glasses or goggles and face shield, chemical resistant gloves, chemical suit and boots. Respiratory protection is required if airborne concentration is high or unknown. Use a respirator if there is a risk of inhaling mist spray. Always wash hands before smoking, eating, drinking or using the toilet.

SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE and ODOR:

Clear viscous liquid, odorless

AUTOIGNITION TEMPERATURE:

N/A

BOILING POINT:

271-293°F (133-145°C)

EXPLOSION LIMITS:

N/A

FLASH POINT:

N/A

FREEZING POINT

50°F (10°C)

MELTING POINT:

N/A

pH:

14

SOLUBILITY IN WATER:

Completely soluble in water

SPECIFIC GRAVITY:

1.5

VAPOR DENSITY:

not available

VAPOR PRESSURE:

27 mm Hg at 140°F (60°C)

VISCOSITY:

6.10 x 10⁻³ Kg/m.s.

SECTION 10 - STABILITY AND REACTIVITY

STABILITY:

Stable. No known explosion or stability hazards.

REACTIVITY:

This product generates heat on dilution with water. Heat evolved may cause boiling or spattering. Corrosive to Aluminum, Zinc and Tin, and produces Hydrogen gas. Reacts violently with acids. Reacts with Ammonium salts generating Ammonia gas. Absorbs water and CO₂ from the air.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Oral LD50 (rat) is 273 mg/kg
Skin irritant dose is 50 mg/24hr (human and rabbit) - Severe

SECTION 12 - ECOLOGICAL INFORMATION

AVOID CONTAMINATING WATERWAYS: TLm: 80 PPM / mosquito fish / 24 hour / fresh waters
HAZARD CATEGORY: Danger - Corrosive

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL: Residues may be diluted, carefully neutralized with dilute acid and flushed to drain with copious amount of water, if permitted by State and local authorities. Empty containers must be decontaminated. Dispose of all waste materials and containers in accordance with all Federal, State and local regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT Proper Shipping Name: Potassium hydroxide, liquid
IMDG class: Class 8
DOT ID No: UN 1814
Packaging group: II
PLACARD: 80 and 1814
LABEL: Corrosive
ADR/RID CLASS CODE: C5

SECTION 15 - REGULATORY INFORMATION

TSCA INVENTORY: CERCLA RQ = 1000 LBS (454 KG)
OSHA FLOOR LIST: Yes
SARA 313: N/A

SECTION 16 - OTHER INFORMATION

Emergency telephone number: **1-800-669-2113 Mon-Fri, 7:30AM - 5:00PM PST**
For immediate response during non-business hours, please contact your local poison control center for more information.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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