



1. Product Identification and Company Information

Product Name : Viagrow pH test kit

Chemical name : Ethyl alcohol with aqueous mixture of pH Indicators.

Product use : To test pH in Hydroponics growing medium

Supplier : Viagrow, 3645 market place blvd suite 130-437
East Point, GA 30344, USA, Tel (+1) 404-349-6957

2. Hazards Identification

EMERGENCY OVERVIEW

This product contain around 6% of ETHYL ALCOHOL. Flammable liquid and vapor. May cause central nervous system depression. Causes severe eye irritation. Causes respiratory tract irritation. Causes moderate skin irritation.

Eye: Causes severe eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage.

Skin: Causes moderate skin irritation. May cause cyanosis of the extremities.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, and coma.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation.

Chronic: May cause reproductive and fetal effects.

3. Composition and Ingredient information

6% of the ingredient contain ethyl alcohol along with demineralized water. Other ingredients are mixed of particular ration of pH indicators which are kept as trade secret to mention the names. This pH indicators to be used in hydroponics plants grow system to find the pH levels which is useful to choose the optimum pH levels to grow plants in hydroponics.

4. First Aid measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Gently lift eyelids and flush continuously with water.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion: Do Induce vomiting and contact physician immediately. Never give anything by mouth to an unconscious person. Get medical aid at urgent.

Inhalation: Remove exposed person to fresh air and support breathing, if necessary. Give oxygen. Consult a physician immediately.



5. Fire-fighting measures

Special information: Wear self-contained breathing apparatus (SCBA) with full face covered because fire may produce toxic decomposed gas reacted with this product.

Flammability Classification: slightly combustible but not classified for pH test kit.

Flash Point: Not known

Auto-ignition Temperature: Not known

LEL: Not known

Burning Rate: Not known

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam.

Unusual Fire or Explosion Hazards: Container may explode in heat of fire.

Hazardous Combustion Products: Can decompose explosively in a fire.

6. Accidental release measures

Spill/Leak Procedures: Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors

Regulatory Requirements: Avoid infiltration of the undiluted product into drains, surface water, groundwater, and soil.

6. Storage and Handling

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

Handling: Avoid ingestion, skin contact, eye contact, and inhalation

8. Exposure control and personal protection:

Airborne Exposure Limits: Limit not yet standardised

Ventilation: General ventilation with good area.

Administrative Controls: Avoid direct contact

Respiratory Protection: If this product is used as directed, respiratory protection is not required. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. If respirators are used, OSHA requires a written respiratory protection program that includes, at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Eye Protection: when using pH Test Indicator, protective eye wear or goggles should be worn per OSHA regulations (29 CFR 1910.134). Contact lenses pose a special hazard. Soft lenses may absorb irritants, and all contact lenses concentrate irritants. Particles may adhere to contact lenses and cause corneal damage.

Protective Clothing: Wear impervious protective clothing when the possibility of skin or clothing contamination may exist. Wear neoprene or rubber gloves when directly handling the product.

Contaminated Equipment: Remove this material from shoes and equipment. Launder contaminated clothing before wearing.

Comments: Never eat, drink, or smoke in work areas. wash hands before eat anything. Follow personnel hygienic practices



9. Physical and chemical properties

Physical State: Aqueous dark greenish to reddish color solution

Density: 0.988

pH: 6.5 - 7.0

Appearance and Odor: dark green to red color with a slight alcohol odor.

Odor Threshold Range: Unknown

Vapor Pressure: Unknown

Water Solubility: Soluble in water

Boiling Point: Unknown

Melting point: Unknown

Other Solubilities: Unknown

10. Stability and reactivity

Stability: Stable under room temperature and normal storage.

Chemical Incompatibilities: pH Indicator may react with strong oxidizing agents.

Conditions to Avoid: Mixture with oxidising agents and high temperature

Hazardous Decomposition Products: At fire or extreme temperature decomposed gases may evolve.

11. Toxicological information

For Ethyl Alcohol Oral, mouse: LD50 = 3450 mg/kg; Oral, rabbit: LD50 = 6300 mg/kg;

Oral, rat: LD50 = 9000 mg/kg; Oral, rat: LD50 = 7060 mg/kg;

12. Ecological information

Eco toxicity: Slight toxic to aquatic inhabitants in higher concentration

Environmental status : Quickly degrades in Soil and Water environment

13. Disposal considerations

Waste Disposal: Dispose waste on accordance with the environmental agency. Except recycling use, otherwise consider as hazardous waste.

14. Transport information

UN No.: Not Applicable

UN Clause .: Not Applicable

UN Package Group .: Not Applicable

IATA. ; Not regulated under dangerous goods as per regulation.

ICAU. ; Not regulated under dangerous goods as per regulation.

DOT classification Not regulated

IMDG Class Not regulated

DATA-DGR Class Not regulated

15. Regulatory information

EPA Regulations: not regulated

16. Other information

This pH indicators to be used in hydroponics plants grow system to find the pH levels which is useful to choose the optimum pH levels to grow plants in hydroponics, information assembled for this Material Safety Data Sheet is for the use of this product as intended by the manufacturer. Users should take all precautions recommended herein while working with this product.

Viagrow provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in using this product.



1. Product Identification and Company Information

Product Name : VIAGROW - pH Down Liquid

Chemical name : Mixture of acids in aqueous solution.

Product use : To lower pH in hydroponics nutrients mixture and plant fertilizers

Supplier : Viagrow, 3645 market place blvd suite 130-437
East Point, GA 30344, USA, Tel (+1) 404-349-6957

2. Hazards Identification

EMERGENCY OVERVIEW

Corrosive to mild corrosive acid causes irritation and burn in every part of body contact. Very harmful if swallowed or inhaled.

Eye: Severe burn and irritation

Skin: Severe burn and irritation

Ingestion: Severe digestive track irritation and burns.

Inhalation: irritation and burns also.

Chronic: Same as acute effect

Carcinogenicity : Not listed as in OSHA

3. Composition and Ingredient information

Though the ingredients are trade secrets the main ingredients are Phosphoric acid and De mineralised water.

4. First Aid measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid with physician also with ophthalmologist. Gently lift eyelids and flush continuously with water for 15 minutes.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion: Never give anything by mouth to an unconscious person. Rinse out the mouth, do not induce vomiting to a unconscious person, and seek immediate medical assistance quickly.

Inhalation: Remove exposed person to fresh air and support breathing, if necessary. Give oxygen. Consult a physician immediately.

Post first aid action : Get a community medical aid.



5. Fire-fighting measures

Special information: Wear self-contained breathing apparatus (SCBA) with full face covered because fire may produce toxic decomposed gas reacted with this product.

Flammability Classification: Not flammable

Flash Point: Not known

Auto-ignition Temperature: Not known

LEL: Not known

Burning Rate: Not known

Extinguishing Media: Use dry chemical, water spray, fog, or foam.

Unusual Fire or Explosion Hazards: Container may explode in heat of fire.

Hazardous Combustion Products: Not known

6. Accidental release measures

Spill/Leak Procedures: Use large amount of water to dilute the contamination. Use personal protective equipment and cover with dry lime or soda ash for neutralization.

Regulatory Requirements: Avoid infiltration of the undiluted product into drains, surface water, groundwater, and soil.

6. Storage and Handling

Storage: Use only in well-ventilated areas. Avoid contact with skin and eyes, inhalation of aerosols and ingestion. Wear an appropriate NIOSH-approved respirator for protection if it is mixed in air.

Handling: Avoid ingestion, skin contact, eye contact, and inhalation

8. Exposure control and personal protection:

Airborne Exposure Limits: Limit not yet standardised

Ventilation: General ventilation with good area.

Administrative Controls: Avoid direct contact

Respiratory Protection: If this product is used as directed, respiratory protection is not required. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/ NIOSH-approved respirator. If respirators are used, OSHA requires a written respiratory protection program that includes, at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Eye Protection: when using pH Test Indicator, protective eye wear or goggles should be worn per OSHA regulations (29 CFR 1910.134). Contact lenses pose a special hazard. Soft lenses may absorb irritants, and all contact lenses concentrate irritants. Particles may adhere to contact lenses and cause corneal damage.

Protective Clothing: Wear impervious protective clothing when the possibility of skin or clothing contamination may exist. Wear neoprene or rubber gloves when directly handling the product.

Contaminated Equipment: Remove this material from shoes and equipment. Launder contaminated clothing before wearing.

Comments: Never eat, drink, or smoke in work areas. Wash hands before eat anything. Follow personnel hygienic practices

9. Physical and chemical properties

Physical State: Yellowish orange solution

Density: Specific gravity 1.14

pH: <2

Appearance and Odor: Yellowish orange odorless solution

Odor Threshold Range: Odorless

Vapor Pressure: Unknown



Water Solubility: Soluble in water

Boiling Point: Unknown

Melting point: Unknown

Other Solubilities: Unknown

10. Stability and reactivity

Stability: Stable under room temperature and normal storage.

Chemical Incompatibilities: react with, alkali's (bases), aldehydes, amines, amides, alcohol's, glycol's, azo-compounds, carbamates, cresols, esters, phenols, metals, metal nitrates, oxides, strong caustics, solutions containing bleach or ammonia.

Conditions to Avoid: Do not mix with ammonia or bleach. Do not put in metal containers. Do not expose to excessive heat.

Hazardous Decomposition Products: phosphorous oxides

11. Toxicological information

For phosphoric acid , mouse oral: LD50 = 1,550 mg/kg; Oral, rabbit skin: LD50 = 230 mg/kg;

12. Ecological information

Eco toxicity: Not known

Environmental status : Not known can be used by plants as fertilizer

13. Disposal considerations

Waste Disposal: Dispose waste on accordance with the state environmental agency. Except recycling use, otherwise consider as hazardous waste.

14. Transport information

UN No.: Not Applicable

UN Clause .: Not Applicable

UN Package Group .: Not Applicable

IATA. ; Not regulated under dangerous goods as per regulation.

ICAU. ; Not regulated under dangerous goods as per regulation.

DOT classification Not regulated

IMDG Class Not regulated

DATA-DGR Class Not regulated

15. Regulatory information

EPA Regulations: not regulated

16. Other information

This pH down liquid to be used in hydroponics plants grow system to adjust the pH in to lower levels which is useful to optimum pH levels to grow plants in hydroponics, information assembled for this Material Safety Data Sheet is for the use of this product as intended by the manufacturer. Users should take all precautions recommended herein while working with this product.

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1. Product Identification and Company Information

Product Name : VIAGROW - pH UP Liquid

Chemical name : Mixture of alkali in aqueous solution.

Product use : To increase pH in hydroponics nutrients mixture and plant fertilizers

Supplier : Viagrow, 3645 market place blvd suite 130-437
East Point, GA 30344, USA, Tel (+1) 404-349-6957

2. Hazards Identification

EMERGENCY OVERVIEW

Corrosive to mild corrosive alkali causes irritation . Harmful if swallowed or inhaled.

Eye: Irritating to Eyes

Skin: Irritating to Skin

Ingestion: harmful if swallowed

Inhalation: irritation and burns also.

Chronic: Not known for significant effects

Carcinogenicity : Not listed / Not Known

3. Composition and Ingredient information

Though the ingredients are trade secrets the main ingredients are Potassium Hydroxide and De mineralised water.

4. First Aid measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid with physician also with ophthalmologist. Gently lift eyelids and flush continuously with water for 15 minutes.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion: Never give anything by mouth to an unconscious person. Rinse out the mouth, do not induce vomiting to a unconscious person, and seek immediate medical assistance quickly.

Inhalation: Remove exposed person to fresh air and support breathing, if necessary. Give oxygen. Consult a physician immediately.

Post first aid action : Get a community medical aid.



5. Fire-fighting measures

Special information: Wear self-contained breathing apparatus (SCBA) with full face covered because fire may produce toxic decomposed gas reacted with this product.

Flammability Classification: Not flammable

Flash Point: Not known

Auto-ignition Temperature: Not known

LEL: Not known

Burning Rate: Not known

Extinguishing Media: Use dry chemical, water spray, fog, or foam.

Unusual Fire or Explosion Hazards: Container may explode in heat of fire.

Hazardous Combustion Products: Not known

6. Accidental release measures

Spill/Leak Procedures: Use large amount of water to dilute the contamination. Use personal protective equipment and cover with dry lime or soda ash for neutralization.

Regulatory Requirements: Avoid infiltration of the undiluted product into drains, surface water, groundwater, and soil.

6. Storage and Handling

Storage: Use only in well-ventilated areas. Avoid contact with skin and eyes, inhalation of aerosols and ingestion. Wear an appropriate NIOSH-approved respirator for protection if it is mixed in air.

Handling: Avoid ingestion, skin contact, eye contact, and inhalation

8. Exposure control and personal protection:

Airborne Exposure Limits: Limit not yet standardised

Ventilation: General ventilation with good area.

Administrative Controls: Avoid direct contact

Respiratory Protection: If this product is used as directed, respiratory protection is not required. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/ NIOSH-approved respirator. If respirators are used, OSHA requires a written respiratory protection program that includes, at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Eye Protection: when using pH Test Indicator, protective eye wear or goggles should be worn per OSHA regulations (29 CFR 1910.134). Contact lenses pose a special hazard. Soft lenses may absorb irritants, and all contact lenses concentrate irritants. Particles may adhere to contact lenses and cause corneal damage.

Protective Clothing: Wear impervious protective clothing when the possibility of skin or clothing contamination may exist. Wear neoprene or rubber gloves when directly handling the product.

Contaminated Equipment: Remove this material from shoes and equipment. Launder contaminated clothing before wearing.

Comments: Never eat, drink, or smoke in work areas. Wash hands before eat anything. Follow personnel hygienic practices

9. Physical and chemical properties

Physical State: Colorless, odorless solution

Density: Specific gravity 1.10

pH: 12

Appearance and Odor: colorless solution

Odor Threshold Range: Odorless

Vapor Pressure: Unknown



Water Solubility: Soluble in water

Boiling Point: Unknown

Melting point: Unknown

Other Solubilities: Unknown

10. Stability and reactivity

Stability: Stable under room temperature and normal storage.

Chemical Incompatibilities: Strong acids, metals (aluminum, zinc, tin), nitro and halocarbons,

Conditions to Avoid: Excess heat and flame

Hazardous Decomposition Products: Carbon di oxide and carbon monoxide

11. Toxicological information

The toxicological properties and related studies not known.

12. Ecological information

Eco toxicity: Not known

Environmental status : Not known, can be used by plants as fertilizer

13. Disposal considerations

Waste Disposal: Dispose waste on accordance with the state environmental agency. Except recycling use, otherwise consider as hazardous waste.

14. Transport information

Do not transport with food stuffs.

Proper shipping name: Corrosive liquid mixture.

Hazard Class: 8

UN/NA: 3266

Packing Group: III

15. Regulatory information

EPA Regulations: not regulated

16. Other information

This pH UP liquid to be used in hydroponics plants grow system to adjust the pH in to higher levels which is useful to optimum pH levels to grow plants in hydroponics, information assembled for this Material Safety Data Sheet is for the use of this product as intended by the manufacturer. Users should take all precautions recommended herein while working with this product.

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