

SAFETY DATA SHEET**SECTION 1: IDENTIFICATION OF SUBSTANCE AND SUPPLIER**

Product Name: *SolviNix[®] LC* (synonyms: *Tobacco mild green mosaic tobamovirus* strain U2; Tobacco mild green mosaic virus strain U2; TMGMV U2; Tobacco mild green mosaic virus ATCC PV-1200)

Manufacturer: *BioProdex, Inc.*

Address: 3131 NW 13th Street, Suite 54, Gainesville, FL 32609-2183, USA

Distributor: Same as the Manufacturer

Telephone: 352-278-1572

FAX: 352-872-5035

E-mail: Info@bioprodex.com

Emergency telephone: 352-278-1572

Responsible Party; Telephone; Email: Raghavan Charudattan, Ph.D.; 352-278-1572; rcharudattan@bioprodex.com

Approved Use: Herbicide


EPA Registration No.: 81179-3

Restrictions on Use: For use only in pastures and wooded areas that are fenced to contain grazing animals. Apply only when tropical soda apple plants are actively growing. Do not apply within 300 feet of greenhouse and grafting operations. Spray directly at the target plant - avoid any crops and nontarget plants. Do not re-use the spray equipment for other uses without thorough cleaning as directed in the pesticide label. Do not apply this product through any type of irrigation system.

SECTION 2: HAZARD IDENTIFICATION

Hazard Classification: This product does not meet the hazardous chemicals criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Signal Word: Warning

Pictogram: 

Hazard Statement: The product is composed of an aqueous concentrate of a naturally occurring plant virus and inert plant ingredients. Plant viruses are ubiquitous in plants and food derived from plants, and are not known or expected to cause infectivity, pathogenicity, or toxicity in humans, animals, or other fauna. Regardless, direct exposure to the product may cause skin, eye, and respiratory tract irritation. Prolonged and/or multiple exposures to microbial proteins in the product may cause allergic sensitization in some individuals.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>Common name</u>	<u>CAS No.</u>	<u>Percent</u>
1. <i>Tobacco mild green mosaic tobamovirus</i> strain U2	Tobacco mild green mosaic virus strain U2	Not applicable	2.9% w/v
2. Other ingredients	Mixture of inert plant ingredients and water	Not applicable	97.1% w/v

SECTION 4: FIRST AID MEASURES

Note to Physicians and First Aid Workers: The product is composed of an aqueous concentrate of a naturally occurring plant virus and inert plant ingredients that are not known or expected to cause infectivity, pathogenicity, or toxicity to humans. Regardless, direct contact of the product with skin or eyes may cause mild irritation. Inhalation of spray mist may cause respiratory tract irritation. Repeated exposure to high concentrations of microbial proteins in the product may cause allergic sensitization in some individuals. Provide symptomatic and supportive care as necessary.

Important:	Have the product container or label with you when calling a poison control center or a doctor, or when going for treatment.
If swallowed:	Call a poison control center or a doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by the poison control center or the doctor. Do not give anything by mouth to an unconscious person.
If on skin or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or a doctor for treatment advice.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or a doctor for further treatment advice.
If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing the eye. Call a poison control center or a doctor for treatment advice.

SECTION 5: FIREFIGHTING MEASURES

The product is composed of an aqueous concentrate of noncombustible materials that pose no fire hazard.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Not applicable
Protective Equipment:	Wear a long-sleeved shirt, long pants, waterproof gloves, socks, shoes, and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.
Methods of Containment and Cleanup:	Mop up spill and place it in a closed container for disposal through a waste disposal facility, a pesticide disposal program run by state or local governments, or the manufacturer. Rinse spill area with water.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:	Avoid contact with skin, eyes, or clothing. Avoid inhalation of spray mist. Wash any contamination from skin or eyes immediately. Wash hands and exposed skin before eating, drinking, smoking, chewing gum, or using the toilet. Remove and wash contaminated clothing before reuse.
Precautions for Safe Storage:	Keep container closed when not in use. Store in a freezer until ready to use. Do not store where food or medicine for human consumption is stored.
Incompatibilities:	Not applicable

SECTION 8: PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

Permissible Exposure Limits (PELs):	Not applicable
Threshold Limit Values (TLVs):	Not applicable
Appropriate Engineering Controls:	Not applicable
Personal Protective Equipment (PPE) Requirement:	Wear a long-sleeved shirt, long pants, waterproof gloves, socks, shoes, and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light green, birefringent liquid
Odor:	No odor
Melting Point:	Not applicable
Boiling Point:	100°C
Density:	1 g/cm ³
Solubility in Water:	100%
pH as Supplied:	~ 5.0

SECTION 10: STABILITY AND REACTIVITY

Storage Stability:	Stable for more than three years.
Conditions to Avoid:	Not applicable
Materials to Avoid:	Not applicable
Hazardous Decomposition Products:	Not applicable
Hazardous Polymerization:	Not applicable

SECTION 11: TOXICOLOGICAL INFORMATION

The product is composed of an aqueous concentrate of a naturally occurring plant virus and inert plant material that have no known or expected toxicity to humans, animals, and other fauna. Regardless, direct exposure to the product may cause skin, eye, and respiratory tract irritation.

Possible Routes of Exposure:	Skin, eyes, and inhalation.
Related Symptoms:	Skin or eye irritation. Respiratory tract irritation.
Acute Effects:	Not applicable
Chronic Effects:	Not applicable
LD ₅₀ and LC ₅₀ Values:	Not applicable

SECTIONS 12: ECOLOGICAL INFORMATION

Ecological Information:	The product is composed of a naturally occurring plant virus that is widely prevalent in the United States and inert plant ingredients. As a naturally occurring biological agent, the virus is not expected to pose an undue ecological risk.
Ecotoxicity Information:	The product is not known or expected to be toxic to aquatic and terrestrial vertebrates and invertebrates and is not expected to pose any ecotoxicity.

SECTION 13: WASTE DISPOSAL CONSIDERATION

Material Disposal:	Dispose material through a waste disposal facility or a pesticide disposal program run by state or local governments or the manufacturer.
Container Disposal:	Dispose by recycling or puncture and dispose of in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14: TRANSPORTATION INFORMATION

Shipping Name	Not applicable
Hazard Class:	Not applicable

SECTION 15: REGULATORY INFORMATION

SolviNix[®] LC is a biopesticide registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for Safety Data Sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION: Keep out of reach of children. Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. When handling this product, wear a long-sleeved shirt, long pants, waterproof gloves, shoes, socks, and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization in some individuals.

SECTION 16: OTHER INFORMATION

Department Issuing SDS:	<i>BioProdex, Inc.</i>
Email Address:	info@bioprodex.com
Training Necessary:	Not required but must follow the directions in the pesticide label.
Reissue Date / Reason for Reissue:	Not applicable
Product's Intended Use:	Herbicide to control tropical soda apple (<i>Solanum viarum</i>), an invasive weed.

Disclaimer: This SDS is based on information that the company believes to be accurate and accordant with the *SolviNix*[®] LC label. In case of discrepancy, the label shall supersede this SDS. The SDS is provided solely for your information and consideration and to comply with the OSHA requirement for a Safety Data Sheet under its Hazard Communication Standard (HCS)(29 CFR 1910.1200). In no event shall *BioProdex, Inc.* be liable for any incidental, consequential, or special damages. The information provided here is not intended as a comprehensive guide concerning hazards that may be associated with this product. User assumes all responsibility for following proper safety protocol and consulting trained personnel for control and containment.