

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: Lepinox WDG
EPA Registration No. 70051-89
Product Type: Insecticide
Active Ingredient: *Bacillus thuringiensis* subspecies *kurstaki* strain EG7826 solids, spores, and lepidopteran toxins
CAS No.: 68038-71-1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Insecticide
Uses advised against: Any use not listed on the label

1.3. Details of the supplier of the safety data sheet

Name: Certis U.S.A., LLC
Address: 9145 Guilford Road, Suite 175
Columbia, Maryland 21046
U.S.A.
Phone Number: +01 (800) 255-3924
Website: <http://www.certisusa.com>

1.4. Emergency telephone number

Emergency number: +1 800 255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Hazard Classification: Category 2A
EPA Signal Word: Warning
Hazard Statements: Causes serious eye irritation
Pictogram:



Precautionary Statements: Causes substantial but temporary eye injury. Do not get in your eyes or on your clothing. Wear goggles or a faceshield. Wash thoroughly with soap and water

after handling. Remove contaminated clothing and wash before reuse.

2.2 Other Hazards:

Do not apply this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application.

SECTION 3: Composition/information on ingredients

3.1 Substances

Component	CAS#	% by weight
<i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> Strain EG 7826	68038-71-1	40
List 4 Inerts	Proprietary	60

SECTION 4: First aid measures

4.1. Description of first aid measures

Generic measures

Eye Contact: Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses after 5 minutes, if present, and continue rinsing eye.
Call poison control center for further treatment advice.

4.2. Most important symptoms and effects, both acute and delayed

Eye irritation

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media: None specified

Unsuitable Extinguishing Media: None specified

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: None known

5.3. Advice for firefighters

Protection of Firefighters: None specified

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: See section 8 for personal protective equipment

For emergency responders: See section 8 for personal protective equipment

6.2. Environmental precautions

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. This product must not be applied aerially within ¼ mile of any habitats of endangered or threatened Lepidoptera. No manual application can be made within 300 ft. of any threatened or endangered Lepidoptera.

6.3. Methods and material for containment and cleaning up

Methods for Containment: Sweep up and recover if possible spilled product.

Methods for Clean-Up: Spilled product that cannot be recovered should be placed in sealed containers for disposal.

Other Information:

6.4. Reference to other sections

See Section 8 for occupational exposure limits and risk management measures. Refer to Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Users should:

Remove clothing PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool dry place inaccessible to children.

Do not contaminate water feed or food by storage or disposal.

7.3. Specific end use(s)

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OSHA Permissible Exposure Limits (PELs): Not determined

ACGIH Threshold Limit Values: Not determined

Other Exposure Limits: Not determined

8.2. Exposure controls

Engineering Controls: None specified

Personal Protective Equipment

Eye/Face Protection: Goggles or faceshield

Skin Protection: Long sleeved shirt and long pants

Hand Protection: Waterproof gloves

Body Protection: Shoes plus socks

Respiratory Protection: Mixers/loaders and applicators must wear 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 sensitizations.

Thermal Hazards: None known

General Hygiene Considerations: Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exists use detergent and hot water. Keep and wash PPE separately from other laundry.

Environmental exposure controls: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. This product must not be applied aerially within ¼ mile of any habitats of endangered or threatened Lepidoptera. No manual application can be made within 300 ft. of any threatened or endangered Lepidoptera.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Brown granule

Odour: Slight vanilla

Odour Threshold: Not determined

pH 1% dilution: 5-7

Melting Point / Freezing Point: Not applicable

Initial Boiling Point: Not applicable

Boiling Range: Not applicable

Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas):	Not flammable
Lower & Upper Flammability Limits:	Not determined
Vapour Pressure:	Not determined
Vapour Density:	
Density:	0.40-0.50 g/cc
Solubility:	Not determined
Partition Coefficient (n-octanol/water):	Not determined
Auto-ignition Temperature:	Not determined
Decomposition Temperature:	Not determined
Viscosity:	
Explosive Properties:	None known
Oxidising Properties:	None known

9.2. Other information

Not available.

SECTION 10: Stability and reactivity

<u>10.1. Reactivity</u>	None known
<u>10.2. Chemical stability</u>	Stable
<u>10.3. Possibility of hazardous reactions</u>	None known
<u>10.4. Conditions to avoid</u>	None specified
<u>10.5. Incompatible materials</u>	None known
<u>10.6. Hazardous decomposition products</u>	None known

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Toxicological information on the substance or mixture:

LD ₅₀ (oral)	> 5050 mg/kg, rat
LD ₅₀ (dermal)	> 5050 mg/kg, rabbit
LC ₅₀ (inhalation)	Not available.

Skin corrosion / irritation: Slightly irritating, Toxicity Category IV.

Eye irritation: Toxicity Category II for unwashed eyes, Toxicity Category IV for washed eyes.

Respiratory or skin sensitization: Not required.

Other information on adverse health effects:

Carcinogenicity

NTP Listed: Not applicable

IARC Listed: Not applicable

OSHA: Not applicable

11.2 Reference to other sections

See Section 4 for symptoms and acute and delayed effects.

SECTION 12: Ecological information

12.1. Toxicity:

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. This product must not be applied aerially within 1/4 mile of any habitats of endangered or threatened Lepidoptera. No manual application can be made within 300 ft. of any threatened or endangered Lepidoptera.

Test species	Test method	Test substance	LC ₅₀
<i>Daphnia magna</i>	21-Day Static Renewal	EG7826 Technical	EC ₅₀ 21 day = 1.9 x 10 ⁹ CFU/L

12.2. Persistence and degradability

Bacillus thuringiensis subspecies *kurstaki* (Btk) shows a rapid loss of activity in response to UV light

12.3. Bioaccumulative potential

Btk is not pathogenic and does not reproduce in living organisms other than target Lepidopteran larvae

12.4. Mobility in soil

Low based on scientific data for Btk.

12.5. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal Instructions: Do not contaminate water, food, or feed by storage and disposal

Pesticide Storage: Store in a cool dry place inaccessible to children.

Pesticide Disposal: Do not contaminate water when disposing of equipment washwaters. Wastes resulting from the use of this product can be disposed of on site, or at an approved waste disposal facility.

Container Handling: Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer to recycling if available, or dispose of empty bag in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14: Transportation information

14.1. UN number

Not regulated.

14.2. UN proper shipping name

Not regulated.

14.3. Transport hazard class(es)

Not regulated.

14.4. Packing group

Not regulated.

14.5. Environmental hazards

Not regulated.

14.6. Special precautions for user

Not regulated.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not regulated.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EPA: This product is a pesticide product registered by the United States 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-pesticidal chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

WARNING/AVISO, KEEP OUT OF REACH OF CHILDREN

Causes substantial or temporary eye injury.

Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

<u>OSHA:</u>	N/A
<u>TSCA Status:</u>	Exempt
<u>CERCLA Reportable Quantity:</u>	N/A
<u>SARA Title III:</u>	
Section 302:	N/A
Section 311/312:	N/A
Section 313:	N/A
<u>RCRA Status:</u>	N/A

SECTION 16: Other information

Disclaimer:

To the best of our knowledge, the information contained herein is accurate. However, neither Certis USA nor any of its subsidiaries assume 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 material may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

SDS Authoring Information:

Revision date:	March 23, 2015
Date of Previous version:	November 19, 2009
Reason for Revision	OSHA Hazard Communication Standard 2012
SDS Prepared by:	Certis U.S.A. L.L.C.