



# SAFETY DATA SHEET

Pioneer Hi-Bred International, Inc.

**Product name:** Optimum® AcreMax® Leptra®

**Issue Date:** 07/15/2020

**Print Date:** 07/15/2020

Pioneer Hi-Bred International, Inc. encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response

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## 1. IDENTIFICATION

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**Product name:** Optimum® AcreMax® Leptra®

**Recommended use of the Substance or Mixture**

**Identified uses:** Agriculture use.

### COMPANY IDENTIFICATION

Pioneer Hi-Bred International, Inc.  
7250 NW 62nd Avenue  
Johnston, IA, 50131  
UNITED STATES

**Customer Information Number** : 800-992-5994

### EMERGENCY TELEPHONE

**24-Hour Emergency Contact** : 800-992-5994

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## 2. HAZARDS IDENTIFICATION

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### Hazard classification

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)  
Not a hazardous substance or mixture.

### Other hazards

No data available

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Bacillus thuringiensis Cry1F protein and the genetic material necessary for its production (plasmid insert PHI8999A; event DAS-Ø15Ø7-1) in corn

Bacillus thuringiensis Cry1Ab protein and the genetic material necessary for its production (plasmid insert pV-ZMBK07; event MON-ØØ81Ø-6) in corn.

Bacillus thuringiensis Vip3Aa20 protein and the genetic material (via elements of pNOV1300) necessary for its production in corn event SYN-IR162-4

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## 4. FIRST AID MEASURES

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**Description of first aid measures****General advice:**

No special precautions are necessary for first aid responders.

**Inhalation:** If any dust associated with the seed is inhaled, move to fresh air.

**Skin contact:** No emergency medical treatment necessary.

**Eye contact:** If dust associated with the seed gets in the eye, remove with water.

**Ingestion:** No specific intervention is anticipated as the compound is not likely to be hazardous.

**Most important symptoms and effects, both acute and delayed:**

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** No emergency medical treatment necessary.

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## 5. FIRE-FIGHTING MEASURES

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**Suitable extinguishing media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable extinguishing media:** Not applicable

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** Not applicable

**Unusual Fire and Explosion Hazards:** Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.

**Advice for firefighters**

**Fire Fighting Procedures:** Water should be applied in large quantities.

**Special protective equipment for firefighters:** Use personal protective equipment.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions, protective equipment and emergency procedures:** Avoid breathing dust.

**Environmental precautions:** No special environmental precautions required.

**Methods and materials for containment and cleaning up:** Clean up floor areas. Use care to minimize generation of airborne dust. Local or national regulations may apply to releases and disposal of this material. See Section 13, Disposal Considerations, for additional information.

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## 7. HANDLING AND STORAGE

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**Precautions for safe handling:** Handle in accordance with good industrial hygiene and safety practice. Avoid high concentrations of dust in air and accumulation of dust on equipment. An airborne dust of this material can create a dust explosion. To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity. Protect all equipment from explosions by following applicable guidelines. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Conditions for safe storage:** Store with low humidity at or below 50% and 50 degrees F to maintain seed viability for 4-6 years. Keep away from heat, sparks, flame, and other sources of ignition.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

### Exposure controls

**Engineering controls:** Good general ventilation should be provided to keep dust concentrations below the exposure limits.

### Individual protection measures

**Eyeface protection:** No eye protection should be needed.

#### Skin protection

**Hand protection:** Protective gloves should not be needed when handling this material.

**Other protection:** No personal body protection normally required.

**Respiratory protection:** For most conditions, no respiratory protection should be needed; however, in dusty atmospheres, use an approved particulate respirator.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

|                                      |                  |
|--------------------------------------|------------------|
| Physical state                       | Solid            |
| Color                                | Yellow           |
| Odor                                 | No distinct odor |
| Odor Threshold                       | Not applicable   |
| pH                                   | Not applicable   |
| Melting point/range                  | Not applicable   |
| Freezing point                       | Not applicable   |
| Boiling point (760 mmHg)             | Not applicable   |
| Flash point                          | Not applicable   |
| Evaporation Rate (Butyl Acetate = 1) | Not applicable   |
| Flammability (solid, gas)            | Not applicable   |

|                                        |                   |
|----------------------------------------|-------------------|
| Lower explosion limit                  | Not applicable    |
| Upper explosion limit                  | Not applicable    |
| Vapor Pressure                         | Not applicable    |
| Relative Vapor Density (air = 1)       | Not applicable    |
| Relative Density (water = 1)           | Not applicable    |
| Water solubility                       | Not applicable    |
| Partition coefficient: n-octanol/water | No data available |
| Auto-ignition temperature              | Not applicable    |
| Decomposition temperature              | Not applicable    |
| Kinematic Viscosity                    | Not applicable    |
| Explosive properties                   | Not applicable    |
| Oxidizing properties                   | Not applicable    |
| Molecular weight                       | Not applicable    |

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** No hazards to be specially mentioned.

**Chemical stability:** Not applicable

**Possibility of hazardous reactions:** None known.

**Conditions to avoid:** None known.

**Incompatible materials:** None.

**Hazardous decomposition products**

No hazardous decomposition products are known.

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data is available.*

### Acute toxicity

#### Acute oral toxicity

No adverse effects are anticipated

#### Acute dermal toxicity

No adverse effects are anticipated

#### Acute inhalation toxicity

No adverse effects are anticipated

**Skin corrosion/irritation**

Essentially nonirritating to skin.

**Serious eye damage/eye irritation**

Essentially nonirritating to eyes.

**Sensitization**

Not classified

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Not applicable

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Not applicable

**Carcinogenicity**

Not classifiable as a human carcinogen.

**Teratogenicity**

Not Classified

**Reproductive toxicity**

Not Classified

**Mutagenicity**

Not Classified

**Aspiration Hazard**

Not applicable

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## 12. ECOLOGICAL INFORMATION

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*Ecotoxicological information appears in this section when such data is available.*

**Toxicity**

**Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

**Persistence and degradability**

No data available.

**Bioaccumulative potential**

**Bioaccumulation:** Not applicable

**Mobility in soil**

No data available.

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### 13. DISPOSAL CONSIDERATIONS

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**Disposal methods:** Dispose in accordance with all local, state (provincial), and federal regulations. If treated with a seed treatment, dispose of any remaining product per container disposal instructions.

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### 14. TRANSPORT INFORMATION

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DOT

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

**Transport in bulk  
according to Annex I or II  
of MARPOL 73/78 and the  
IBC or IGC Code**

Not regulated for transport

Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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### 15. REGULATORY INFORMATION

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#### **Federal Insecticide, Fungicide and Rodenticide Act**

EPA Registration Number: 29964-26

This plant incorporated protectant (PIP) is 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, and for workplace labels of non-pesticide chemicals.

Cry1F, Cry1Ab and Vip3Aa20 proteins have been granted exemption from the requirement of a tolerance by EPA: 40 CFR Sect 174.504, 174.511 and 174.501 respectively.

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## **16. OTHER INFORMATION**

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### **Revision**

Identification Number: 011000010689 / Issue Date: 07/15/2020 / Version: 0.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

### **Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Pioneer Hi-Bred International, Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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