Section 1: Identification

1.1 Product identifier	Optimum® AcreMax® XTreme
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Recommended use	N/AP
Restrictions on use	N/AP
1.3 Details of the supplier of the safety data sheet	Pioneer Hi-Bred International, Inc. 7250 NW 62nd Avenue Johnston, IA 50131
1.4 Emergency telephone number	1-800-342-7123

Section 2: Hazard(s) Identification

2.1 Classification of the substance or mixture	Not applicable
2.2 Label Elements	
Pictogram	Not applicable
Signal word	Not applicable
Hazard statement(s)	This product is a non-hazardous material.
Precautionary statement(s)	No special precautions.
2.3 Other hazards	N/AP

Section 3: Composition/Information on Ingredients

3.1 Substances	*Bacillus thuringiensis* Cry1F, Cry34/35Ab1, Cry1Ab and mCry3A Corn Seed
3.2 Mixtures	
Ingredient #1: *Chemical name*	N/AP
Common name and synonyms	*Bacillus thuringiensis* Cry1F protein and the genetic material (plasmid insert PHI8999A) necessary for its production in corn event DAS-Ø15Ø7-1
CAS number (and other unique identifiers)	6481
Impurities and stabilizing additives	N/AP
Concentration	N/AP
Ingredient #2: *Chemical name*	N/AP
Common name and synonyms	*Bacillus thuringiensis* Cry34/35Ab1 proteins and the genetic material (PHP17662 T-DNA) necessary for its production in corn DAS-59122-7
CAS number (and other unique identifiers)	6490
Impurities and stabilizing additives	N/AP
Concentration	N/AP

Ingredient #3: *Chemical name*	N/AP
Common name and synonyms	*Bacillus thuringiensis* Cry1Ab protein and the genetic material (vector PV-ZMBK07) necessary for its production in corn event MON-ØØ81Ø-6
CAS number (and other unique identifiers)	6526
Impurities and stabilizing additives	N/AP
Concentration	N/AP
Ingredient #4: *Chemical name*	N/AP
Common name and synonyms	*Bacillus thuringiensis* mCry3A protein and the genetic material (via elements of pZM26) necessary for its production in corn event SYN-IR6Ø4-5
CAS number (and other unique identifiers)	6509
Impurities and stabilizing additives	N/AP
Concentration	N/AP

Section 4: First Aid Measures

4.1 Description of first aid measures	No need for first aid is anticipated
4.2 Most important symptoms and effects, both acute and delayed	N/AP
4.3 Indication of any immediate medical attention and special treatment needed	N/AP

Section 5: Firefighting Measures

5.1 Extinguishing media	Use extinguishing media appropriate for surrounding fire.
5.2 Special hazards arising from the substance or mixture	None
5.3 Advice for firefighters	None

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures	None required.
6.2 Environmental precautions	None required.
6.3 Methods and material for containment and cleaning up	Non-hazardous material. If material is spilled, sweep up and dispose in accordance with all applicable federal, state and local environmental regulations.
6.4 Reference to other sections	N/AP

Section 7: Handling and Storage

7.1 Precautions for safe handling	Keep in original packaging, tightly closed in a safe place. Retain original product labeling.
7.2 Conditions for safe storage, including any incompatibilities	Store with low humidity at or below 50% and 50 degrees F to maintain seed viability for 4-6 years. Combustible material; keep away from heat and flames.
7.3 Specific end use(s)	Use in accordance with product labeling.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters	
OSHA PELs	N/AP
ACGIH TLVs	N/AP
8.2 Exposure controls	
Engineering controls	N/AP
PPE	None required.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties	
Appearance	Corn seed
Upper/lower flammability or explosive limits	N/AP
Odor	No obvious odor.
Vapor pressure	N/AP
Odor threshold	N/AP
Vapor density	N/AP
pH	N/AP
Relative density	N/AP
Specific gravity	~1.26
Melting point/freezing point	N/AP
Solubility(ies)	N/AP
Initial boiling point and boiling range	N/AP
Flash point	N/AP
Evaporation rate	N/AP
Flammability (solid, gas)	N/AP
Partition coefficient: n-octanol/water	N/AP
Auto-ignition temperature	N/AP
Decomposition temperature	N/AP
Viscosity	N/AP
Explosive properties	N/AP
Oxidizing properties	N/AP
9.2 Other information	N/AP

Section 10: Stability and Reactivity

10.1 Reactivity	Material is non-reactive.
10.2 Chemical stability	N/AP
10.3 Possibility of hazardous reactions	N/AP
10.4 Conditions to avoid	N/AP
10.5 Incompatible materials	N/AP
10.6 Hazardous decomposition products	None known.

Section 11: Toxicological Information

11.1 Information on toxicological effects	None observed.

Section 12: Ecological Information

12.1 Toxicity	**Cry1F**: Ingestion LD50 (Mouse) >5050 mg/kg **Cry34/35Ab1**: Ingestion LD50 (Mouse) >2000 mg/kg **Cry1Ab**: Ingestion LD50 (Mouse) >4000 mg/kg **mCry3A**: Ingestion LD50 (Mouse) >2377 mg/kg Acute toxicity data generated on comparable *Bacillus thuringiensis* microbial toxins have produced results that demonstrate no toxicity to non-target insects, fish, and avian species.
12.2 Persistence and degradability	N/AP
12.3 Bioaccumulative potential	N/AP
12.4 Mobility in soil	N/AP
12.5 Results of PBT and vPvB assessment	N/AP
12.6 Other adverse effects	N/AP

Section 13: Disposal Considerations

13.1 Waste treatment methods	Dispose of material within all applicable federal, state, and local environmental regulations.

Section 14: Transport Information

14.1 UN number	N/AP
14.2 UN proper shipping name	N/AP
14.3 Transport hazard class(es)	N/AP
14.4 Packing group	N/AP
14.5 Environmental hazards	N/AP
14.6 Special precautions for user	N/AP
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	N/AP

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	EPA Registration Number: 29964-15
15.2 Chemical safety assessment	Cry1F, Cry34/35Ab1,Cry1Ab and mCry3A proteins have been granted exemption from the requirement of a tolerance by EPA: 40 CFR Sect 174.504, 174.506, 174.511 and 174.505 respectively.

Section 16: Other Information

N/AP