



Safety Data Sheet

Preparation Date 23-Sep-2019

Revision date 23-Sep-2019

Revision Number: 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Identification of the product

Product Description STartUP ACE98 Seed Treatment

Other means of identification

Product code 12U-352
Registration number(s) 70506-352

Recommended use of the chemical and restrictions on use

Recommended use Seed treatment.
Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet

Supplier Address

UPL NA Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number

Company Phone Number 1-800-438-6071
Emergency telephone number Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison and Drug Safety (866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 3

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements

HARMFUL IF SWALLOWED
Toxic if inhaled



Appearance Fine, white

Physical state powder Highly

Odor rotten Cabbage

hydroscopic

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not get in eyes, on skin, or on clothing
 Use only outdoors or in a well-ventilated area

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
 Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

OTHER INFORMATION

- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Methamidophos	10265-92-6	0.33
Acephate	30560-19-1	98.3

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

FIRST AID MEASURES

Eye contact Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects no data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Cholinesterase inhibitor. Atropine is antidotal. PAM may also be used in conjunction with atropine but should not be used alone.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Carbon dioxide (CO₂). Sulfur oxides. Oxides of nitrogen. Oxides of phosphorous.

Explosion data

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with skin and eyes. Provide adequate ventilation. Use personal protective equipment.

Environmental Precautions

Environmental precautions Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for Clean-Up Sweep up and shovel into suitable containers for disposal. Reduce dust spreading with water spray, collect rinsate. Shovel or sweep up.

7. Handling and Storage

Precautions for safe handling

Handling Keep out of reach of children. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust. Provide adequate ventilation. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Empty containers may contain hazardous residues.

Conditions for safe storage, including any incompatibilities

Storage Keep away from direct sunlight. Keep containers tightly closed in a cool, well-ventilated place.

incompatible materials Alkaline.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection

Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available.

Skin protection

Chemical resistant gloves. Chemical resistant protective clothing.

Respiratory protection

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

<p>Physical state Appearance color</p>	<p>powder Highly hygroscopic Fine, white No information available</p>	<p>Odor</p>	<p>rotten Cabbage</p>
---	---	--------------------	-----------------------

Property	VALUES	Remarks/ • Method
pH	3.04	
Melting point/freezing point	4.04 °C / 39 °F	
Boiling Point/Range	No information available	
Flash Point	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability limit in air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	No information available	
Vapor Density	No information available	
Specific gravity	No information available	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	no data available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

<p>Softening point molecular weight VOC Content Liquid Density Bulk density</p>	<p>No information available 183.2 No information available No information available 25-30 lbs/ft3</p>
--	---

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Not known. Excess moisture.

incompatible materials

Alkaline.

Hazardous decomposition products

Oxides of sulfur. Oxides of nitrogen. Oxides of phosphorous.

11. Toxicological Information

Information on Likely Routes of Exposure**Product information**

Acephate
 Oral LD50 (rat) (female) = 1464.6 mg/kg
 Dermal LD50 (rat) = >2000 mg/kg
 Inhalation LC50 (rat) 4 hr = >2.634 mg/l

Inhalation May cause irritation of respiratory tract.

Eye contact Moderately irritating to the eyes.

Skin contact Irritating to skin.

Ingestion HARMFUL IF SWALLOWED.

Information on Toxicological Effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Mutagenic effects no data available.

Carcinogenicity The information below indicates whether any agency has listed any ingredient as a carcinogen.

Reproductive effects Not Available.

STOT - Single Exposure no data available.

STOT - Repeated Exposure no data available.

Aspiration hazard No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral 1464.6 mg/kg (rat)

LD50 Dermal >2000 mg/kg (rat)

LC50 Inhalation LC50/inhalation/4h/rat = > 2.634 mg/l

12. Ecological Information

ecotoxicity

Acephate = Highly toxic to bees (1.2 ug/bee)
 Toxic to birds.
 Rainbow trout LC50 (96 hr) = >1000 mg/L
 Bluegill LC50 (96 hr) = >2000 mg/L
 Mallard duck Oral LD50 = 350 mg/kg

Persistence/Degradability

no data available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
Methamidophos 10265-92-6	-0.8

Other Adverse Effects

no data available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Dispose of in accordance with all applicable federal, state, and local laws and regulations.

Contaminated packaging

Refer to product label.

14. Transport Information

DOT

NOT REGULATED

IATA

NOT REGULATED

IMDG

NOT REGULATED

15. Regulatory Information

This chemical is a pesticide product 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. Following is the hazard information as required on the pesticide label:

signal word

CAUTION

For formulation only. Keep out of Reach of Children. Harmful if swallowed. Causes moderate eye irritation. Toxic to birds.

International Inventories

USINV	Not present
DSL/NDSL	Not present
EINECS/ ELINCS	Not Present
ENCS	Not Present
China	Not Present
KECL	Not Present
PICCS	Not Present
AICS	Not Present
TSCA	Not Present

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

CERCLA

Chemical name	RQ	CERCLA EHS RQs	RQ
Methamidophos 10265-92-6	-	100 lb	

CERCLA

SARA Product RQ 0

Component	CERCLA EHS RQs
Methamidophos 10265-92-6 (0.33)	100 lb

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Methamidophos 10265-92-6 (0.33)	Restricted as liquid formulations 40% and greater for tobacco Restricted as dust formulations 2.5% and greater for tobacco.		X	Present

State Regulations

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island

Methamidophos - 10265-92-6	X	X	X	X	
Acephate - 30560-19-1		X		X	

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-352

16. Other Information

NFPA

HEALTH 2

flammability 0

Instability 0

Physical hazard -

Preparation Date 23-Sep-2019

Revision date 23-Sep-2019

Revision Summary

Add to system

Disclaimer

UPL NA Inc. believes that the information and recommendations container herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of UPL NA Inc. and UPL NA Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

End of SDS