

PRIME+® EC

Date: 9/28/2017
 Replaces: 8/24/2016

1. PRODUCT IDENTIFICATION

Product identifier on label: **PRIME+® EC**
 Product No.: A6623C
 Use: Growth Inhibitor
 Manufacturer: Syngenta Crop Protection, LLC
 Post Office Box 18300
 Greensboro NC 27419
 Manufacturer Phone: 1-800-334-9481

Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications: Skin Corrosion/Irritation: Category 2
 Skin Sensitizer: Category 1B
 Carcinogenicity: Category 2
 Specific Target Organ Toxicity: Repeated Category 2
 Specific Target Organ Toxicity: Drowsiness Category 3
 Specific Target Organ Toxicity: Respiratory Irritation Category 3
 Aspiration Hazard: Category 1
 Flammable Liquid: Category 3
 Eye Damage/Irritation: Category 1

Signal Word (OSHA): **Danger**

Hazard Statements: Flammable liquid and vapor
 May be fatal if swallowed and enters airways
 Causes skin irritation
 May cause an allergic skin reaction
 Causes serious eye damage
 May cause respiratory irritation
 May cause drowsiness or dizziness
 Suspected of causing cancer
 May cause damage to organs through prolonged or repeated exposure

Hazard Symbols:



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Precautionary Statements: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames, hot surfaces. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, ventilating, lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
In case of fire: Use dry chemical, foam or CO2 for extinction.
Do not breathe mist, vapors, spray.
Wash hands and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves, protective clothing, eye protection.
If swallowed: Immediately call a poison center, doctor or Syngenta.
If on skin: Wash with plenty of soap and water.
If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water.
If skin irritation or rash occurs: Get medical advice.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Immediately call a poison center, doctor or Syngenta.
Get medical advice if you feel unwell.
See Section 4 First Aid Measures.
Do NOT induce vomiting.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
Ethyl Benzene	Ethyl Benzene	100-41-4	<5.0%
Xylene	Xylene	1330-20-7	<15.0%
1,2,4-Trimethylbenzene	1,2,4-Trimethylbenzene	95-63-6	<20.0%
1,2-Propanediol	Propylene Glycol	57-55-6	Trade Secret

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Petroleum Solvent	Petroleum Solvent	Trade Secret	Trade Secret
Other ingredients	Other ingredients	Trade Secret	>45.0%
2-chloro-N-[2,6-dinitro-4-(trifluoromethyl)phenyl]-N-ethyl-6-fluorobenzenemethanamine	Flumetralin	62924-70-3	15.0%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

- Ingestion:** If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Eye Contact:** If in eyes: 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 Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Skin Contact:** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Inhalation:** If inhaled: 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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Most important symptoms/effects:

- Eye irritation
- Skin irritation
- Allergic skin reaction
- Drowsiness or dizziness
- Respiratory irritation

Indication of immediate medical attention and special treatment needed:

- There is no specific antidote if this product is ingested.
- Treat symptomatically.
- Probable mucosal damage may contraindicate gastric lavage.
- Persons suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids.
- Contains petroleum distillate - vomiting may cause aspiration pneumonia.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

Flammable liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

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Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Warning: Flammable vapors may be present. Eliminate sources of ignition and ventilate spill area. Use non-sparking clean-up equipment to prevent vapor ignition.

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:

Protect from light and humidity.

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Ethyl Benzene	100 ppm TWA	20 ppm TWA; 125 ppm STEL	100 ppm TWA; 125 ppm STEL	Manufacturer
Xylene	100 ppm TWA	100 ppm TWA; 150 ppm STEL	100 ppm TWA	NIOSH
1,2,4-Trimethylbenzene	Not Established	25 ppm TWA	25 ppm TWA	NIOSH
Propylene Glycol	Not Established	Not Established	10 mg/m ³ TWA	AIHA
Petroleum Solvent	Not Established	Not Established	100 mg/m ³ TWA	Manufacturer
Other ingredients	Not Established	Not Established	Not Established	Not Applicable
Flumetralin	Not Established	Not Established	5 mg/m ³ TWA	Syngenta

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Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:

Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact:

Where contact is likely, wear chemical-resistant (such as barrier laminate or Viton) gloves, coveralls, socks and chemical-resistant footwear.

Inhalation:

A combination particulate/ organic vapor respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with an HE prefilter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear orange liquid

Odor: Aromatic solvent

Odor Threshold: Not Available

pH: 6.6 (1%)

Melting point/freezing point: Not Applicable

Initial boiling point and boiling range: 293 °F

Flash Point (Test Method): 104°F (Closed Cup)

Flammable Limits (% in Air): Not Available

Flammability: Flammable liquid and vapor

Vapor Pressure: Flumetralin < 9.8 x 10⁻⁷ mmHg @ 68°F (20°C)

Vapor Density: Not Available

Relative Density: 1.004 g/ml

Solubility (ies): Flumetralin 0.1 mg/l @ 77°F (25°C)

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: > 752°F

Decomposition Temperature: Not Available

Viscosity: Not Available

Other: None

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10. STABILITY AND REACTIVITY

Reactivity: Not reactive.
 Chemical stability: Stable under normal use and storage conditions.
 Possibility of hazardous reactions: Will not occur.
 Conditions to Avoid: Flame, heat, ignition sources.
 Incompatible materials: None known.
 Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Eye irritation, Drowsiness or dizziness, Skin irritation, Respiratory irritation

Delayed, immediate and chronic effects of exposure: Possible carcinogenicity, Eye irritation, Skin irritation, Allergic skin reaction, Drowsiness or dizziness, Respiratory irritation

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:	Oral (LD50 Rabbit) :	4400 mg/kg body weight
Dermal:	Dermal (LD50 Rat) :	2010 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	> 2.5 mg/l air - 4 hours
Eye Contact:	Corrosive (Rabbit)	
Skin Contact:	Moderately Irritating (Rabbit)	
Skin Sensitization:	Sensitizing (Guinea Pig)	

Reproductive/Developmental Effects

Flumetralin: None observed.

Chronic/Subchronic Toxicity Studies

Flumetralin: Liver, blood, and spleen toxicity occurred at the highest dose level (dogs); Effects on liver (rats)

Carcinogenicity

Flumetralin: None observed.

Chemical Name	NTP/IARC/OSHA Carcinogen
Ethyl Benzene	IARC Group 2B
Xylene	IARC Group 3
1,2,4-Trimethylbenzene	No
1,2-Propanediol	No
Petroleum Solvent	No
Other ingredients	No

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2-chloro-N-[2,6-dinitro-4-(trifluoromethyl)phenyl]- No
N-ethyl-6-fluorobenzenemethanamine

Other Toxicity Information

None

Toxicity of Other Components

1,2,4-Trimethylbenzene

Inhalation of 1,2,4-trimethylbenzene at high concentrations can cause central nervous system depression, respiratory tract irritation, asphyxiation, cardiac stress and coma. Effects of chronic exposure to this solvent can include blood disorders (anemia, leukopenia) and kidney or liver damage.

Ethyl Benzene

Inhalation of ethyl benzene at high concentrations can cause central nervous system depression, respiratory tract irritation, asphyxiation, cardiac stress and coma.

Other ingredients

Not Established

Petroleum Solvent

Respiratory irritation, dizziness, nausea, loss of consciousness.

Propylene Glycol

Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Also, eye irritation may occur with lacrimation but no residual discomfort or injury. Prolonged contact to skin may cause mild to moderate irritation and possible allergic reactions. Chronic dietary exposure caused kidney and liver injury in experimental animals.

Xylene

Inhalation of xylene at high concentrations can cause central nervous system depression, respiratory tract irritation, asphyxiation, cardiac stress and coma.

Target OrgansActive Ingredients

Flumetralin: Blood, liver, spleen

Inert Ingredients

1,2,4-Trimethylbenzene: CNS, liver, kidney, blood, respiratory tract, skin, eye

Ethyl Benzene: CNS, respiratory tract, skin

Other ingredients: Not Established

Petroleum Solvent: Respiratory tract, CNS, skin

Propylene Glycol: CNS, kidney, liver

Xylene: CNS, respiratory tract, skin

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Flumetralin:

Fish (Rainbow Trout) 96-hour LC50 > 3.2 ppb

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 > 2.8 ppb

Bird (Bobwhite Quail) 21-day LD50 > 2150 mg/kg

Environmental Fate

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The information presented here is for the active ingredient, flumetralin.
Low bioaccumulation potential. Stable in soil and water. Immobile in soil. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Ignitable D001

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Proper Shipping Name: Flammable Liquid, N.O.S. (Pseudocumene, Xylenes)

Hazard Class: Class 3

Identification Number: UN 1993

Packing Group: PG III

Air Transport - NAFTA

Proper Shipping Name: Flammable Liquid, N.O.S. (Substituted Benzenoid Hydrocarbons)

Hazard Class: Class 3

Identification Number: UN 1993

Packing Group: PG III

Packing Instruction: 309/310 - Max. inner package 10 liters; Max. single package 60 liters passenger, 220 liters cargo

Comments

Water Transport - International

Proper Shipping Name: Flammable Liquid, N.O.S. (Pseudocumene, Xylenes),

Marine Pollutant

Hazard Class: Class 3

Identification Number: UN 1993

Packing Group: PG III

IMDG EMS #: F-E, S-E

Air Transport - International

Proper Shipping Name: Flammable Liquid, N.O.S. (Pseudocumene, Xylenes)

Hazard Class: Class 3

Identification Number: UN 1993

Packing Group: PG III

Packing Auth.: F-E, S-E

Note: 309/310 - Max. inner package 10 liters, Max. single package 60 liters passenger, 220 liters cargo

15. REGULATORY INFORMATION

Pesticide Registration:

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:

Danger: Corrosive. Causes irreversible eye damage. Do not get in eyes, on skin or on clothing. Wear appropriate protective eyewear such as goggles, face shield, or safety glasses. Causes skin irritation. Avoid contact with eyes, skin, or clothing. Harmful if swallowed or absorbed through the skin. Prolonged or frequently repeated skin contact may cause

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allergic reactions in some individuals. 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.

EPA Registration Number(s):
100-640

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: Acute Health Hazard
Chronic Health Hazard
Fire Hazard

Section 313 Toxic Chemicals: Flumetralin 15.0% (CAS No. 62924-70-3)
Ethyl Benzene <5.0% (CAS No. 100-41-4)
Xylene <15.0% (CAS No. 1330-20-7)
1,2,4-Trimethylbenzene <20.0% (CAS No. 95-63-6)

CERCLA/SARA 304 Reportable Quantity (RQ):

Report product spills > 85 gal. (based on xylene [RQ = 100 lbs.] content in the formulation)

RCRA Hazardous Waste Classification (40 CFR 261):

Ignitable D001

TSCA Status:

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 3
Instability: 0

HMIS Hazard Ratings

Health: 2
Flammability: 3
Physical Hazard: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme
*	Chronic

Syngenta Hazard Category: C,S

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 11/25/1985

Revision Date: 9/28/2017

Replaces: 8/24/2016

Section(s) Revised: 14

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.