

# SAFETY DATA SHEET

## TRIPLE CROWN



### SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name:** Triple Crown  
**EPA Registration No.:** 279-3340-33270  
**Product Type:** Insecticide  
**Active Ingredient:** **Zeta-Cypermethrin:** (*S*)-cyano(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate  
**Bifenthrin:** (2-methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate  
**Imidacloprid:** 1-(6-chloro-3-pyridylmethyl)-N-nitroimidazolidin-2-ylideneamine  
**Manufacturer/Registrant:** United Suppliers, Inc.  
30473 260<sup>th</sup> St.  
Eldora, IA 50627

**FOR MEDICAL EMERGENCIES:** Contact PROSAR 1-800-331-3148 for emergency medical information.  
**FOR CHEMICAL EMERGENCY:** Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300.

### SECTION 2. HAZARDS IDENTIFICATION

THE FOLLOWING HAZARDS ARE IDENTIFIED ACCORDING TO OSHA HCS CLASSIFICATION (29 CFR 1910.1200).

#### Hazard Classifications:

- Acute Oral Toxicity: Category 3
- Acute Inhalation Toxicity: Category 4
- Carcinogenicity: Category 2
- Specific Target Organ Toxicity: Category 1 (Single Exposure)
- Specific Target Organ Toxicity: Category 1 (Oral – repeated exposure)

**Signal Word:** DANGER

#### Pictograms:



#### Hazard Statements:

- Toxic if swallowed
- Harmful if inhaled
- Suspected of causing cancer
- Causes damage to organs
- Causes damage to organs through prolonged or repeated exposure

#### Precautionary Statements:

- Wash hand and face thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: immediately call a poison center or ad doctor. Rinse mouth. Store locked up.
- Avoid breathing dust, mist, vapor or spray. Use in a well-ventilated area. If inhaled, remove victim to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and clothing, eye and face protection. If exposed or concerned: get medical advice. Store locked up.
- Do not breathe dust, fume, gas, mist, vapors or spray. Wash hands and face thoroughly after handling. Wear protective gloves. Do not eat, drink or smoke when using this product. If exposed: call poison center or a doctor. Store locked up.

**Storage and Disposal:** See Section 7 and 13.

**Other Hazards:** See Section 11 and 12.

### SECTION 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>CAS No.</u>	<u>Percentage (%) by Weight:</u>
Imidacloprid	138261-41-3	13.83
Bifenthrin	82657-04-3	7.87
Zeta-cypermethrin	52315-07-8	2.7
Propylene glycol	57-55-6	5 – 10
Naphtha (petroleum), heavy aromatic	64742-94-5	5 – 10
2-Methylnaphthalene	91-57-6	<8*
1-Methylnaphthalene	90-12-0	<5*

\*This component is a constituent(s) of the ingredient: Naphtha (petroleum), heavy aromatic.

### SECTION 4. FIRST AID MEASURES

- If Swallowed:** Immediately call a poison control center or doctor for treatment advice.  
Do not induce vomiting unless told to do so by the poison control center or doctor.  
Do not give any liquid to the person  
Do not give anything by mouth to an unconscious person.
- 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 a poison control center or doctor for treatment advice.
- If on skin or clothing:** Take off contaminated clothing.  
Rinse skin immediately with plenty of water for 15-20 minutes.  
Sensitized persons should avoid further contact and reuse of contaminated clothing.  
Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment.

Medical Emergency Telephone Number: Call PROSAR at 1-80-331-3148 for assistance.

**Note to Physician:** Contains petroleum distillates. Vomiting may cause aspiration pneumonia. This product contains a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### SECTION 5. FIRE FIGHTING MEASURES

**Flash Point:** > 100°C (>212°F) (closed cup)

**Flammable Limits (LFL & UFL):** Not available

**Extinguishing Media:** Use water fog, foam, fine spray, dry chemical or carbon dioxide if necessary.

**Unusual Fire and Explosion Hazards:** None known.

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

**Fire Fighting Procedures and Equipment:** Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize damage. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Steps to be Taken if Material is Released or Spilled:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep upwind of spill. Ventilated area of leak or spill. Use appropriate safety equipment. Prevent from entering into soil, ditches,

sewers, waterways and/or groundwater. Spills or discharge to natural waterways is likely to kill aquatic organisms. Contain spilled material if possible. Small spills: Absorb with materials such as clay, dirt, sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: contact Chemtrec for assistance.

## SECTION 7. HANDLING AND STORAGE

Do not contaminate water, food, or feed, or other pesticides or fertilizers by storage and disposal.

**HANDLING:** Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Keep container closed. Use adequate ventilation.

**STORAGE:** Do not freeze. Store in a dry, cold place and avoid excess heat. Store in original container. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not store near food, foodstuffs, drugs or potable water supplies.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.  
FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

**Eye and Face Protection:** If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Skin (Hand) Protection:** Wear long-sleeved shirt, long pants, socks, and shoes. Protective gloves.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### User Safety Recommendations:

Users should:

- Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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 gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Engineering Controls:** Refer to product label. Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations. When working in confined spaces (tanks, containers, etc.) ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

### Exposure Limits:

Chemical Name	CAS NO.	ACGIH/TLV	OSHA/PEL	OTHERS
2-Methylnaphthalene	91-57-6	0.5 ppm (skin, TWA)	NE	NE
1-Methylnaphthalene	90-12-0	0.5 ppm (skin, TWA)	NE	NE
Propylene glycol	57-55-6	NE	NE	10 mg/m <sup>3</sup> (TWA)*
Naphthalene	91-20-3	10 ppm (TWA) (Absorbed via skin)	10 ppm 50 mg/m <sup>3</sup> (TWA)	NE

\*Ontario TWAEV

NE: Not Established

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Office-white liquid

**Odor:** Aromatic hydrocarbon  
**Odor Threshold:** No data available  
**pH:** 4.01  
**Flash Point:** >100°C (>212°F) (closed cup)  
**Flammability:** Not available  
**Density:** 9.22 lb/gal  
**Water Solubility:** Miscible with water  
**Kinematic Viscosity:** 334 cSt (mm<sup>2</sup>/s)@23°C; 760cSt (mm<sup>2</sup>/s)@43°C  
**Flammability (Solid, Gas):** Not available  
**Upper/Lower Flammability/Explosive Limits:** Not available  
**Auto-ignition Temperature:** Not available  
**Explodability:** Not available  
**Solubility:** Not available  
**Partition Coefficient (n-Octanol/Water):** Not available  
**Vapor Pressure:** No volatile  
**Vapor Density:** Not applicable  
**Freezing point:** Not available  
**Boiling Point:** Not available  
**Evaporation Rate:** Not available  
**Decomposition Temperature:** Not available

## SECTION 10. STABILITY AND REACTIVITY STABILITY:

**Stability:** Stable under normal use and storage conditions.  
**Conditions and Materials to Avoid:** Heat, flames and sparks.  
**Incompatibility:** None known.  
**Hazardous Polymerization:** Will not occur.  
**Hazardous Decomposition Products:** Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide, hydrogen chloride, hydrogen fluoride.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity/Irritation Studies (End-Use Product)

Acute oral toxicity:	LD <sub>50</sub> (rat)	175 mg/kg
Acute Dermal toxicity:	LD <sub>50</sub> (rabbit):	> 5,000 mg/kg
Acute inhalation toxicity:	LC <sub>50</sub> (rat):	> 2.08 mg/L (4-hr)
Eye irritation:	Minimally irritating (rabbit)	
Skin irritation:	Moderately irritating (rabbit)	
Skin Sensitization:	Non-sensitizing	

### Toxicological Information:

#### Symptoms:

Large doses of zeta-cypermethrin, ingested by laboratory animals, may produce signs of toxicity including tremors, incoordination, convulsions, staggered gait, and oral discharge. Large doses of bifenthrin ingested by laboratory animals produced signs of toxicity including convulsions, tremors and bloody nasal discharge.

#### Chronic/Subchronic Toxicity:

Bifenthrin: Long-term exposure caused neurotoxicity (tremors and impaired gait) in the early exposure in animal studies, but tremors disappeared with continued exposure.

Zeta-cypermethrin: Long-term exposure caused neurotoxicity (body tremors, decreased motor activity), decreased body weight and increased liver weight.

#### Reproductive/Developmental Toxicity:

For all three active ingredients, no toxicity to reproduction in animal studies. Not teratogenic in animal studies done with bifenthrin and Zeta-cypermethrin.

#### **Mutagenicity:**

Bifenthrin: Not genotoxic in laboratory studies.

Zeta-cypermethrin: Not genotoxic in laboratory studies.

Imidacloprid: The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

#### **Carcinogenicity:**

Imidacloprid: No evidence of carcinogenicity from animal studies.

Bifenthrin: Weak treatment-related response for liver adenocarcinomas and benign bladder tumors (lesion) in male mice. EPA classified Bifenthrin as Group C – possible human carcinogen.

Cypermethrin caused an increase in benign lung tumors in mice, but not in rats. EPA has classified cypermethrin as a possible human carcinogen based on this information, but does not regulate based on its low cancer risk.

Naphthalene: No evidence of carcinogenic activity in male mice, but there was some evidence of carcinogenic activity in female mice and clear evidence of carcinogenic activity in male and female rats in 2-year inhalation studies conducted by the National Toxicology Program (NTP).

#### **Carcinogenicity Assessment: (Naphthalene)**

ACGIH: A3 – Confirmed animal carcinogen with unknown relevance to humans

NTP : Reasonably anticipated to be human carcinogen

IARC : Group 2B: Possibly carcinogenic to humans

OSHA : None

**Target Organs:** Central Nervous System (CNS), blood, thyroid, liver

**Aspiratory Hazard:** Potential for aspiration if swallowed

**Specific Target Organs Systemic Toxicity (Single Exposure):** Causes damage to target organs.

**Specific Target Organ Systemic Toxicity (Repeated Exposure):** Causes damage to target organs through prolonged or repeated exposure.

## **SECTION 12. ECOLOGICAL INFORMATION**

**Environmental Hazards:** This product is extremely toxic to fish, aquatic invertebrates, oysters and shrimp. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. This product is prohibited in areas where its application may result in exposure to endangered species. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeks. Do not apply this product or allow it to drift to blooming crops if bees are visiting the treatment area.

The chemical imidacloprid demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### **Ecotoxicity Information:**

##### **Imidacloprid -**

LC<sub>50</sub> (96h) Rainbow Trout: 211 mg/L

LD<sub>50</sub> Bobwhite Quail: 152 mg/kg

EC<sub>50</sub> (48h) Daphnia magna: 85 mg/L

EC<sub>50</sub> (72h) Algae: > 10 mg/L

Bee LD<sub>50</sub>: 0.0039 ug/bee

##### **Bifenthrin -**

Bifenthrin is very highly toxic to fish, crustaceans and aquatic animals. Care should be taken to avoid contamination of the aquatic environment. LC<sub>50</sub>: 0.00015 mg/L (rainbow trout), 0.00035 mg/L (bluegill), 0.0016 mg/L (daphnia).

Bifenthrin is moderately toxic to many species of bird.

LC<sub>50</sub>: 1,280 ppm (mallard duck); 4,450 ppm (bobwhite quail).

LD<sub>50</sub>: 2,150 mg/kg (mallard duck); 1,800 mg/kg (bobwhite quail),

Bifenthrin is toxic to bees.

#### Zeta-cypermethrin-

LC<sub>50</sub> (96h) Fish: 0.69 µg/L; NOEC (21-d) 0.015 µg/L

EC<sub>50</sub> (48h) Crustacea: 0.14 µg/L; NOEC (21-d) 0.01 µg/L

EC<sub>50</sub> (72h) Algae: > 1 mg/L

#### **Environmental Fate Information:**

##### **Persistence and Degradability:**

Imidacloprid: Does not readily hydrolyze.

Bifenthrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.

Zeta-cypermethrin: Non-persistent, Readily hydrolyzed. Not readily biodegradable.

##### **Bioaccumulation:**

Bifenthrin: Has a potential for bioconcentration.

Zeta-cypermethrin: Does not have a potential for bioconcentration.

##### **Mobility:**

Bifenthrin and Zeta-cypermethrin: Immobile, not expected to reach groundwater.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

**Container Disposal:** Refer to product label for container disposal. Dispose of product containers, waste containers, and residues according to local, state and federal health and environmental regulations.

## **SECTION 14. TRANSPORT INFORMATION**

### DOT

Proper Shipping Name: Pyrethroid pesticide, liquid, toxic

UN Number: UN 3352

Class: 6.1

Packing Group: III

Marine Pollutant (for shipping in bulk): Zeta-cypermethrin

### IMDG/IMO

Proper Shipping Name: Pyrethroid pesticide, liquid, toxic

UN Number: UN 3352

Class: 6.1

Packing Group: III

Marine Pollutant: Bifenthrin, Zeta-cypermethrin

### ICAO/IATA

Proper Shipping Name: Pyrethroid pesticide, liquid, toxic

UN Number: UN 3352

Class: 6.1

Packing Group: III

Marine Pollutant: Bifenthrin, Zeta-cypermethrin

