SAFETY DATA SHEET



Date Issued: 7/17/2015 SDS No: Virtue 4EC

Date Revised: 1/11/2018

Revision No: 1

Virtue 4EC

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Virtue 4EC CHEMICAL FAMILY: Herbicide

DISTRIBUTOR

Innvictis Crop Care, LLC 1880 Fall River Drive Suite 100 Loveland, CO 80538

EPA REG. NO.: 89168-31-89391

24 HR. EMERGENCY TELEPHONE NUMBERS

24-Hour Emergency Assistance Call: 1-800-222-1222 Chemical Emergency Call CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 5 Acute Toxicity (Dermal), Category 5 Acute Toxicity (Inhalation), Category 5 Skin Irritation, Category 2 Eye Irritation, Category 2A Skin Sensitization, Category 1B

Environmental:

Acute Hazards to the Aquatic Environment, Category 2

GHS LABEL



SIGNAL WORD: WARNING

HAZARD STATEMENTS

H303: May be harmful if swallowed.

H313: May be harmful in contact with skin.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H333: May be harmful if inhaled.

H401: Toxic to aquatic life.

PRECAUTIONARY STATEMENTS

General:

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

Prevention:

P261: Avoid breathing mist, vapors or spray.

P264: Wash hands, face and other affected areas thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P321: Specific treatment see Section 4, First Aid Measures, on this SDS.

P363: Wash contaminated clothing before reuse.

Disposal:

P501: Dispose of contents/container to Local, State and Federal Regulations.

POTENTIAL HEALTH EFFECTS

EYES: Causes substantial, but temporary, eye irritation.

CARCINOGENICITY: Not Listed as a carcinogen

SENSITIZATION: This product may cause an allergic skin reaction.

COMMENTS HEALTH: Read all precautions of products being handled and follow the most restrictive language for all products to provide the safest work environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Propanil	44.4	709-98-8
Isophorone	34	78-59-1
Other Ingredients	21.6	Mixture

4. FIRST AID MEASURES

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

SKIN: 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.

INGESTION: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

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

NOTES TO PHYSICIAN: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

ADDITIONAL INFORMATION: Have the product container or label with you when calling a poison control center or doctor, or going in for treatment. For emergency medical assistance call **NPCC 1-800-222-1222** or call **CHEMTREC 1-800-424-9300**.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Toxic fumes may be emitted in a fire situation.

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of carbon, nitrogen and phosphorous.

EXPLOSION HAZARDS: No specific explosion hazards are identified or expected. Always fight fire with the implication that other volatile substances may be present.

FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

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

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

LARGE SPILL: Dike around the spill area to prevent spreading. Pick up spilled material with suitable absorbent material and place in appropriate container for disposal. Scrub the contaminated area with a detergent or soap solution. Place it and unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not contaminate any body of water. **LAND SPILL:** Avoid runoff onto any adjacent land.

SPECIAL PROTECTIVE EQUIPMENT: Always wear proper protective equipment when handling this product.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid contact with eyes and contact with skin. Remove clothing 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.

STORAGE: Ground all metal containers when transferring product. Protect from freezing. If stored below 32°F and crystals form, warm to 72°F for 24 hours, periodically shaking or rolling container to reconstitute.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultral pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical goggles or shielded safety glasses (ANSI Z87.1 or approved equivalent) when handling and mixing product. Contact lenses should not be worn when working with chemicals.

SKIN: Wear chemical resistant gloves such as Viton or barrier laminate, Coveralls over long-sleeved shirt, long pants and chemical resistant footwear plus socks. Chemical resistant headgear for overhead exposure. When exposed to product concentrate, wear a chemical resistant apron. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

RESPIRATORY: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Wear a NIOSH/MSHA approved dust mask or filter when vapors are expected to be generated above the permissable limit.

PROTECTIVE CLOTHING: Eye protection, long sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent

and hot water. Keep and wash PPE separately from other laundry.

OTHER USE PRECAUTIONS: Avoid contact with skin, eyes, and clothing. Avoid breathing vapors. Wash thoroughly after handling product. Eye wash fountains and drench showers should be located within 100 feet or a 10 second walk from the work area per ANSI Z358.1-1990

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Moderate camphor APPEARANCE: Liquid COLOR: Light tan, yellow

pH: 5 to 6.5

PERCENT VOLATILE: Not Established FLASH POINT AND METHOD: > (200°F) FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: Not Established VAPOR DENSITY: Not Established BOILING POINT: Not Established FREEZING POINT: <= (32°F) MELTING POINT: Not Established POUR POINT: Not Established

THERMAL DECOMPOSITION: Not Established SOLUBILITY IN WATER: Moderately Soluble EVAPORATION RATE: Not Established

DENSITY: ~ 9.5 lbs/gal.

SPECIFIC GRAVITY: 1.13 to 1.15 g/mL

VISCOSITY: Not Established

MOLECULAR WEIGHT: Not Established

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Extreme heat and freezing temperatures.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, acids, and bases.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 3000 mg/kg **ORAL LD**₅₀: > 2000 mg/kg **INHALATION LC**₅₀: > 6.0 g/mL

EYE EFFECTS: Causes substantial, but temporary, eye injury.

SKIN EFFECTS: Causes mild skin irritation.

CARCINOGENICITY

Notes: Not listed in OSHA, NTP, IARC or ACGIH

SENSITIZATION: This product may cause an allergic skin reaction.

COMMENTS: These physical data are typical values based on material tested but may vary from sample to sample. Typical

values should not be construed as a guaranteed analysis of any specific lot or as specification items.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This pesticide is toxic to fish and aquatic invertebrates.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to http://www.acrecycle.org/ for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated by DOT

PRIMARY HAZARD CLASS/DIVISION: Not regulated by DOT

UN/NA NUMBER: None PACKING GROUP: None

PLACARDS: None LABEL: None VESSEL (IMO/IMDG)

SHIPPING NAME: UN 3082, Environmentally Hazardous Substance, liquid, n.o.s. (Propanil), Class 9, PG III, Marine Pollutant,

ERG 171

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: No

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Propanil	44.4	709-98-8

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Isophorone	34	5,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Isophorone	78-59-1

CALIFORNIA PROPOSITION 65: Not Listed

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):

Labeling 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:

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

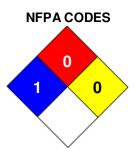
WARNING

Causes substantial, but temporary, eye injury. Causes skin irritation. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Do not get in eyes, on skin or clothing.

16. OTHER INFORMATION

REASON FOR ISSUE: New Revision

REVISION SUMMARY: This SDS replaces the 7/19/2015 SDS. Revised: Section 1: REASON FOR ISSUE.



GENERAL STATEMENTS: DISCLAIMER AND LIMITATION OF LIABILITY

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