

Cal Crop USA II, LLC

Safety Data Sheet
Tomahawk II™

SDS Version 2.0
Revision Date 01/20/2017

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name	Tomahawk II™
MSDS Number	Exempt
EPA Registration No.	25b Exempt

Cal Crop USA II, LLC
P.O. Box 698
Bonsall, CA 92003
USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-424-9300 (24 hours/day)
For Product Information call: 1-760-994-7922

SECTION 2. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview Warning! Causes mild but temporary eye irritation. Tastes awful if swallowed and may cause upset stomach. Annoying if inhaled or absorbed through skin. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Prolonged or frequently repeated skin contact may cause dry skin. Emergency spill clean up soap and water. Non toxic, Non Hazardous to the environment.

Physical State liquid

Appearance Light tan to dark green color with strong garlic and clove odor

Exposure routes Ingestion, Eye contact, Inhalation, Skin Absorption, Skin contact

Immediate Effects

Eye Mild eye irritation. Do not get in eyes.

Skin Mild skin irritation. This material is stabilized with vinegar and contains citric acid. Prolonged contact may cause dry skin. Do not get on skin.

Ingestion May cause upset stomach if swallowed. Do not take internally.

Inhalation Mists may cause mild respiratory tract irritation. Do not breathe vapors or spray mist.

Chronic or Delayed Long-Term This product contains NO ingredients that are considered to be probable or suspected human carcinogens (see Section 11 - Chronic).

G.R.A.S Compound

Product is a Generally Regarded As Safe compound made from food grade materials under CFR 182.10, 182.20 and 184.1317

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Potential Environmental Effect Non toxic to bees. Non toxic to fish and aquatic invertebrates. May repel deer, cattle, birds and horses from feeding on plants in spill area for up to 10 days. Strong garlic odor.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Garlic extracts	8000-78-0	10.0
Citric acid	77-92-9	29.0

SECTION 4. FIRST AID MEASURES

General When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Eye Hold eye 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 eye. If irritation persists, call a physician or poison control center.

Skin Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 5 minutes. If you get dry skin call a physician or poison control center.

Ingestion Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Inhalation Move 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 physician or poison control center immediately.

Notes to physician

Hazards Contains vinegar and garlic extracts and can cause upset stomach and diarrhea

Treatment Treat symptomatically. There is no specific antidote. Recommend skin crème for dry skin, saline solution for irritated eyes, and pepto bismol for upset stomach.

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SECTION 5. FIRE FIGHTING MEASURES

Flash point 180 °C / 212.0 °F

Suitable extinguishing media Non combustible liquid. For container and packaging; Water spray, Foam, Dry chemical,

Fire Fighting Instructions

Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
- Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, dirt, universal binder, sawdust). Collect and transfer the product into a properly labeled and tightly closed container. Clean contaminated floors and objects thoroughly with soap and water observing environmental regulations.
- Additional advice** Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

SECTION 7. HANDLING AND STORAGE

- Handling procedures** Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Keep away from heat and sources of ignition.
- Storing Procedures** Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

The 30-day storage temperature average must not exceed the recommended maximum.
- Work/Hygienic Procedures** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.
- Min/Max Storage Temperatures** Recommended minimum transport/storage temperature: -18 °C / -0 °F
Recommended maximum transport/storage temperature: 38 °C / 100 °F

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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- General Protection** Follow all label instructions. Train employees in safe use of the product.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.
- Eye/Face Protection** Safety glasses, in case of increased risk, also a face shield Or Goggles
- Hand protection** Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
- Body Protection** Wear long-sleeved shirt and long pants and shoes plus socks.
- Respiratory protection** When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Exposure Limits

Garlic Extracts	8000-78-0	None	None	None
Citric acid	77-92-9	None	None	None

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** Light tan to dark green color with strong garlic odor
- Physical State** liquid
- pH** 5.0 to 5.5 at 20 °C
- Density** ca. 1.3 g/cm³ at 20 °C

SECTION 10. STABILITY AND REACTIVITY

- Chemical Stability** Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity studies have not been performed on Envirepel 20™. Acute toxicity studies have been bridged from a similar garlic formulation containing approximately half the percentage of active ingredient.

- Acute oral toxicity** male/female combined rabbit:LD50: None
- Acute dermal toxicity** male/female combined rabbit: LD50: None

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Acute inhalation toxicity	None
Skin irritation	rabbit: Mild skin irritation
Eye irritation	rabbit: Eye irritation.
Sensitization	None

Assessment Carcinogenicity

ACGIH
None

NTP
None

IARC
None

OSHA
None.

Reproductive toxicity	DEVELOPMENTAL TOXICITY: None.
Neurotoxicity	None
Mutagenicity	None

SECTION 12. ECOLOGICAL INFORMATION

Environmental precautions	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor runoff or drift. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.
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SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance	Pesticide wastes from tank mixed applications can be acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use 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.
Container Disposal	Triple rinse containers and offer up for recycling. Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by combustion or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke. Follow advice on product label and/or leaflet
RCRA Information	G.R.A.S compounds may be safe by themselves and classified as non hazardous waste, but when used in tank mixes, the characterization and proper disposal of this material as a non hazardous, special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

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SECTION 14. TRANSPORT INFORMATION

49CFR	Not applicable, Non Hazardous, Non Flammable material.
IMDG	Not applicable, Non Hazardous, Non Flammable material.
IATA	Not applicable, Non Hazardous, Non Flammable material

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15. REGULATORY INFORMATION

EPA Registration No. Exempt

US Federal Regulations

TSCA list

None

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None

US States Regulatory Reporting

CA Prop65

This product does NOT contain any chemical known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

None

Canadian Regulations

Canadian Domestic Substance List

None

Environmental

CERCLA

None

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Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

None

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 0 Reactivity - 0 Others - none

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions.