



SAFETY DATA SHEET

According to U.S. 29 CFR 1910.1200

Date of Issue: 12 January 2012

Revision Number: 7

REQUIEM[®] EC

Replaces all previous editions

Note: This MSDS is only for use in the USA.

SECTION 1: IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY / UNDERTAKING

Product Name:	REQUIEM [®] EC	Synonyms:	Not Applicable
Product Use:	Insecticide/Acaricide Emulsifiable Concentrate		
Manufacturer:	AgraQuest, Inc.	Distributor:	Not Applicable
Address:	1540 Drew Avenue Davis, California 95618, USA	Address:	
Telephone:	1.530.750.0150	Telephone:	Not Applicable
Emergency Phone: (CHEMTREC)	In USA call CHEMTREC 24-hour toll-free hotline at 1.800.424.9300 Outside USA, call 1.703.527.3887 (collect calls accepted)		

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient:</u>	<u>CAS No.</u>	<u>Percent</u>
1. Terpene Constituents of Extract of <i>Chenopodium ambrosioides</i> near <i>ambrosioides</i> as Synthetically Manufactured	Proprietary Information	16.75%
2. Mixture of inert, non-reactive ingredients	Not Applicable	83.25%

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: Combustible Liquid. Product has very low toxicity via ingestion, skin contact, or inhalation. May cause skin and eye irritation in some individuals. May cause sensitization by skin contact.

Possible Routes of Entry: Eyes and skin

Potential Health Effects from Over-exposure

Skin/ Eye Irritation: Direct contact with skin or eyes may cause irritation in some individuals. May cause sensitization by skin contact in some individuals.

Section 3 Notes: In the unlikely event that over-exposure occurs, follow first aid measures in section 4.

SECTION 4: FIRST AID MEASURES

General: Remove from source of exposure. If irritation or other signs of toxicity occur, seek medical attention.

Eyes: Hold eye open and rinse slowly and gently with plenty of water for at least 15 minutes. If present, remove contact lenses and continue rinsing eye. Seek medical attention.

Skin: Remove contaminated clothing. Thoroughly wash skin with plenty of soap and water. If irritation persists, seek medical attention.

Inhalation: Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration.

Ingestion: Call a doctor immediately if a large amount is swallowed. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

Note to Physicians and First Aid Providers: This product has low oral, dermal, and inhalation toxicity. Direct contact with eyes may cause temporary irritation. Provide symptomatic and supportive care as necessary.

SECTION 5: FIRE-FIGHTING MEASURES

General: Use methods and protective gear that are appropriate for the conditions and size of the fire.

Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Use appropriate media for underlying cause and combustibles involved in the fire.

Special Equipment: Self-contained breathing apparatus and full protective gear according to the conditions and size of the fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear suitable protective clothing such as long-sleeved shirt, pants, impervious gloves, safety glasses or goggles, and shoes with socks. See Section 8 for respirator requirements.

Methods for Clean Up: Isolate spill or leak area. Extinguish any open flames. Soak up material with absorbent and shovel into a chemical waste container for disposal. Rinse spill area with water and flush to a sewer serviced by a permitted wastewater treatment facility.

Section 6 Notes: Refer to section 8 for personal protection and section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Handling: Use handling procedures that minimize exposure to the product.

Storage: Store in a cool, dry, well-ventilated place in original container. Do not use or store near heat, open flame or hot surfaces. Keep container closed when not in use. Do not contaminate other pesticides, fertilizers, water, or feed by storage or disposal.

Section 7 Notes: Avoid contact with skin, eyes and clothing. Wash any contamination from skin or eyes immediately. Wash hands and exposed skin before eating, drinking, smoking or using the toilet.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

General: Protective clothing should be selected according to the conditions likely to be encountered in the workplace. Ensure good ventilation. No exposure limits have been established.

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to reduce airborne exposure.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION continued

Personal Protective Equipment:

Respiratory:	Not normally required in open, well-ventilated areas. However, in enclosed areas such as greenhouses, applicators and other handlers must wear a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.
Eyes and Face:	Chemical safety goggles or safety glasses with side shields.
Hands/Skin:	Gloves made from chemically resistant material such as neoprene, vinyl, rubber, or nitrile.
Other Clothing:	Wear suitable protective clothing such as long-sleeved shirt, pants, and shoes with socks.
Hygienic Practices:	Wash hands and exposed skin before eating, drinking, smoking or using the toilet.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Pale yellow to amber liquid with aromatic, characteristic terpene odor
Melting Point:	Not Applicable
Boiling Point:	≥ 100° C (≥ 212° F)
Flash Point:	87.2° C (189° F) (Cleveland Open Cup)
Density:	0.89 – 0.91 g/ml
Solubility in Water:	Miscible
pH:	5.2 – 5.4 (1% aqueous)
Viscosity:	18.2 mPa-s

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable, material is non-reactive.
Conditions to Avoid:	Avoid heat, sparks, open flames, other ignition sources, and strong oxidizing agents.
Materials to Avoid:	None that are known.
Hazardous Decomposition Products:	None that are known.
Hazardous Polymerization:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Possible Routes of Entry: Eyes and skin

Potential Health Effects from Over-exposure

Skin/Eye:	Direct contact with skin or eyes may cause temporary irritation in some individuals. May cause sensitization by skin contact.
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Acute studies on product:

Acute Oral LD ₅₀ (Rat):	> 5,000 mg/kg	Eye Irritation (Rabbit):	Minimal to mild
Acute Dermal LD ₅₀ (Rabbit):	> 2,020 mg/kg	Dermal Irritation (Rabbit):	Nonirritant
Acute Inhalation LD ₅₀ (Rat):	> 5.19 mg/L (Limit test)*	Sensitization (Guinea Pig):	Non-sensitizer (Buehler/M&K)
		Sensitization (Mouse):	Sensitizer (LLNA)**

Section 11 Notes: None of the components of this product are listed as carcinogenic by NTP, IARC, or OSHA.
 * No deaths or toxic effects were observed in the test animals during the study period.
 ** Negative for sensitization with both Buehler and M&K Maximization studies in guinea pigs, but positive using LLNA assay in mice.

SECTION 12: ECOLOGICAL INFORMATION

Ecological Information: No information available, however, the components in this product are readily biodegradable in soil and water.

Ecotoxicity Information: Based on results from aquatic toxicity studies with the active ingredient, the active ingredient in this product is moderately toxic to toxic to aquatic invertebrates and fish. No data for the formulated product.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Method: Open dumping or burning of this material or its packaging is prohibited. Treatment, storage, transportation and disposal must be in accordance with applicable regulations.

Empty Container: Completely empty container into application equipment, rinse with water and add rinsate to application equipment. Dispose of empty container in accordance with applicable environmental regulations.

Section 13 Notes: Because regulatory requirements are subject to change and acceptable methods of disposal may vary by location, the appropriate agencies should be contacted for advisement prior to disposal. Characterization and compliance with applicable laws are the responsibility of the generator.

SECTION 14: TRANSPORT INFORMATION

Land: ADR / RID Class: May be regulated as a hazardous material under ADR (Europe)
Air: IATA – DGR Class: May be regulated as a hazardous material.

US Department of Transportation (DOT) and International Maritime Dangerous Goods (IMDG) Classification

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s., (Cymenes)
Identification Number: UN 3082
Class / Division: 9
Packing Group: III
ERG Number: 171
Marine Pollutant: Severe Marine Pollutant (Cymenes)
Freight Classification: Insecticides, Fungicides N.O.I., Other Than Poisons. NMFC 155050 Class 60

SECTION 15: REGULATORY INFORMATION

U.S. EPA SARA: Acute health (sensitization) No chronic health hazards. Fire hazard. No release of
(Title III Classification) pressure, or reactivity hazards.

U.S. EPA: EPA Registration Number 69592-25

SECTION 16: OTHER INFORMATION

Reason for Revision: MSDS for use in USA only Supersedes MSDS dated: October 28, 2011
Added M&K sensitization results to tox section.

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