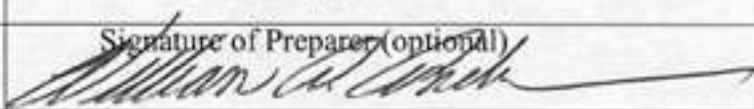


Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard.
29 CFR 1910.1200 Standard must be
consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List)		Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.	
GARLIC BARRIER AG			
Section I			
Manufacturer's Name		Emergency Telephone Number	
Garlic Research Labs		1-800-424-7990	
Address (Number, Street, City, State, and ZIP Code)		Telephone Number for information	
624 Ruberta Avenue		818-247-9600	
Glendale, CA 91201-2335		Date Prepared October 24, 1999	
		Signature of Preparer (optional) 	
Section II – Hazardous Ingredients/Identity Information			
Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended c/o (optional)
Allium Sativum extract / Garlic Juice	n/a	n/a	n/a
Section III – Physical/Chemical Characteristics			
Boiling Point	N/A	Specific Gravity (H ₂ O = 1)	1.1
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water Slight			
Appearance and Odor Yellowish sand color. Strong garlic odor.			
Section IV – Fire and Explosion Hazard Data			
Flash Point (Method Used)	Flammable Limits	LEL	UEL
N/A		N/A	N/A
Extinguishing Media Non flammable			
Special Fire Fighting Procedures None			
Unusual Fire and Explosion Hazards None			

Section V – Reactivity Data			
STABILITY	Unstable		Conditions to Avoid
	Stable	X	Prolonged skin contact, may cause slight irritation
Incompatibility (Materials to Avoid) None			
Hazardous Decomposition or Byproducts None			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	
Section VI – Health Hazard Data			
Route(s) of Entry:	Inhalation? Yes	Skin? No	Ingestion? No
Health Hazards (Acute and Chronic) None known.			
Carcinogenicity	NTP? No	IARC Monographs? No	OSHA Regulated? No
Signs and Symptoms of Exposure If in direct contact, slight skin irritation may occur.			
Medical Conditions Generally Aggravated by Exposure None			
Emergency and First Aid Procedures If in eyes or on skin, flush with plenty of water.			
Section VII – Precautions for Safe Handling and Use			
Steps to Be Taken in Case Material Is Released or Spilled. Wash area with water and sweep away. Product is biodegradable.			
Waste Disposal Method Place in containers and take to waste disposal center.			
Precautions to Be Taken in Handling and Storing Store in cool dry place.			
Other Precautions None.			
Section VIII – Control Measures			
Respiratory Protection (Specify Type) None			
Ventilation	Local Exhaust	N/A	Special
	Mechanical (General)	N/A	Other
Protective Gloves Yes		Eye Protection Goggles only.	
Other Protective Clothing or Equipment Long sleeve shirts and long pants and high top shoes			
Work/Hygienic Practices Wash thoroughly after handling and applying			

MIXING DIRECTIONS

Shake container well or stir contents thoroughly before mixing. Mix 1 gallon AG+ to 99 gallons water or 1 gallon AG+ to 50 gallons water (if infestation exists). After mixing concentrate, agitate again before spraying to prevent settling.

APPLICATION DIRECTIONS

TIMING: Apply as a preventative treatment prior to insect infestation. Make the first application at foliar emergence and repeat on a 10-14 day spray schedule to maintain the repellency effect.

METHOD OF APPLICATION: Garlic Barrier may be applied by air or ground equipment.

RATE OF APPLICATION: Set equipment to thoroughly wet foliage. Spray over 10 acres at rate of 10 gallons per acre for 1:99 mixture. Spray at rate of 5 gallons per acre for 1:50 mixture. If spraying orchards (trees), use any amount water but 25.5 ounces per acre of AG+ mixed in water. Garlic Barrier is compatible with most surfactants and conventional pesticides. The most effective ambient temperature range for application is 60 to 85 degrees F.

AFTER TASTE: AG+ will impart no garlic taste to food crops.

STORAGE AND DISPOSAL

STORAGE: The optimum storage temperature is between 35 and 90 degrees F to prevent product degradation. Do not freeze. Do not store in direct sunlight. Do not use or store near heat, open flame or hot surfaces.

DISPOSAL: Rinse bottle and present for recycling.

EFFECTIVE FOR REPELLING THE FOLLOWING:

ANIMALS, BIRDS AND MORE - Armadillos, Deer, Field Mice, Fleas, Geese, Gnats, Mosquitos, Rabbits and Ticks.

BRASSICA VEGETABLES - (Broccoli, Brussels Sprouts, Cabbages, Chinese Mustard, Cauliflower, Collards, Kale, Kohlrabi, and Mustard Greens): For repelling Aphids, Beetles, Caterpillars, Cutworms, Loopers, Maggots, Weevils, Whiteflies, and Wireworms.

BULB VEGETABLES - (Garlic, Leek, Onion, and Shallot): For repelling Armyworms, Leafminers, Maggots, Thrips, and Wireworms.

CEREAL GRAINS - (Barley, Buckwheat, Corn, Millet, Oats, Popcorn, Rice, Rye, Sorghum, Wheat, and Wild Rice): For repelling Aphids, Armyworms, Beetles, Borers, Chinch Bugs, Cutworms, Earworms, Grasshoppers, Maggots, Mites, Rootworms, White Grubs, and Wireworms.

CITRUS - (Calamondin, Citron, Grapefruit, Hybrids, Kumquats, Lemons, Limes, Oranges, Pummelo, Satsuma Madarin, Tangelos and Tangerines) : For repelling Aphids, Cutworms, Leafrollers, Mites, Scale, Thrips, and Whiteflies.

COTTON - For repelling Aphids, Armyworms, Bollworms, Boll Weevils, Cotton Leaf Perforator, Cutworms, Fleahoppers, Loopers, Lygus Bugs, Mites, Saltmarsh Caterpillar, Thrips, Webworms, and Whiteflies.

This product has not been registered by the U.S. Environmental Protection Agency. Garlic Research Labs, Inc. represents that this product qualifies for exemption from registration under the Federal Insecticide, Fungicide and Rodenticide Act.

Manufactured by: Garlic Research Labs

624 Ruberta Avenue

Glendale, California 91201-2335

EMAIL: Garlic@Loop.Com

Web Address: WWW.GarlicBarrier.Com

Toll Free Phone: 800-424-7990

Made in USA



GARLIC BARRIER AG+

INSECT REPELLENT

Keep insects from getting on plants and trees.

Applied product becomes odorless in minutes.

Keep Out of Reach of Children

Avoid contact with eyes. If in the eyes, flush with plenty of water.

ACTIVE INGREDIENTS:

Garlic Juice..... 99.3%

INERT INGREDIENTS:

Citric Acid (from corn)..... .5%

Potassium Sorbate (to preserve freshness) .2%

TOTAL:..... 100%



OMRI[™]
Listed

Net Weight 9.25 lbs/4.2 Kilos Vol: 128OZ/3.79L

CUCURBIT CROPS - (Cucumbers, Cantaloupe, Casaba Melons, Gherkins, Gourds, Honeydew Melons, Mango Melons, Muskmelons, Pumpkins, Summer and Winter Squash, and Watermelons): For repelling Aphids, Beetles, Leafhoppers, Leafminers, Loopers, Mites, Thrips, Whiteflies, and Wireworms.

FORAGE CROPS - (Alfalfa, Clovers, Grasses, Timothy, and Vetch): For repelling Aphids, Armyworms, Caterpillars, Chinch Bugs, Cutworms, Grasshoppers, Japanese Beetles, Leafhoppers, Lygus Bugs, Mites, Spittlebugs, Thrips, Weevils, and Webworms.

FRUITING VEGETABLES - (Bell Peppers, Chile Peppers, Cooking Peppers, Eggplant, Ground Cherry, Pepinos, Pimentos, Sweet Peppers, Tomatillo, and Tomatoes): For repelling Aphids, Beetles, Cutworms, Fruitworms, Hornworms, Leafminers, Loopers, Mealybugs, Mites, Plant Bugs, Whiteflies, and Wireworms.

HERBS - (Angelica, Anise, Basil, Bay, Bee Balm, Bergamot, Borage, Burnet, Calendula, Caraway, Catnip, Chamomile, Chervil, Chives, Cicely, Coriander, Costmary, Dill, Dittany of Crete, Fennel, Feverfew, Foxglove, Garlic, Geraniums, Germander, Horehound, Horseradish, Hyssop, Lady's Mantle, Lamb's Ear, Laurel, Lavender, Lemon Balm, Lemon Verbena, Uden, Lovage, Lungwort, Marjoram, Meadowsweet, Mint, Mellein, Nasturtium, Oregano, Parsely, Rose, Rosemary, Rue, Sage, Santolina, Savory, Sedum, Sorrel, Southerwood, Sunflowers, Tansy, Tarragon, Thyme, Valerian, Violets, Woodruff, Wormwood, and Yarrow): For repelling Aphids, Caterpillars, Mealy Bug, Mites, Scale, and Whiteflies.

KIWI - For repelling Japanese Beetles.

LEAFY VEGETABLES - (Celery, Cress, Endive, Fennel, Lettuce, Orach, Spinach, and Swiss Chard): For repelling Aphids, Earworms, Grasshoppers, Leafhoppers, Leafminers, Loopers, Sowbugs, Webworms, Whiteflies, and Wireworms.

LEGUME VEGETABLES - (Beans including Phaseolus Spp., Lupinus Spp., and Vigna Spp., Broad Beans, Chick Peas, Guar, Jackbean, Lablab Beans, Lentils, Peas, and Soybeans): For repelling Aphids, Beetles, Borers, Curculios, Cutworms, Earworms, Leafhoppers, Leafrollers, Loopers, Lygus Bugs, Maggots, Mites, Plant Bugs, Weevils, Whiteflies, and Wireworms.

NUT TREES - (Almond, Beech Nut, Brazil Nut, Buttemut, Chestnut, Chinquapin, Filbert, Hickory Nut, Macadamia Nut, Pecan, Pistachio, Walnut): For repelling Aphids, Beetles, Borers, Bud Moths, Carpenterworms, Casebearers, Catocalas, Curculios, Gall Wasps, Leafminers, Mites, Phylloxera, Plant Bugs, Sawflies, Scale, Shuckworms, Spittlebugs, Twig Girdlers, Walnut Caterpillars, Webworms, Weevils.

ORNAMENTALS - (Flowers, Shrubs, and Trees): For repelling Aphids, Bagworms, Beetles, Borers, Chafers, Curculios, Cutworm, Gypsy Moths, Inchworms, Leafhoppers, Leafminers, Leafrollers, Maggots, Mealybugs, Mites, Plant Bugs, Sawflies, Scale, Spittlebugs, Webworms, and Whiteflies.

PEANUTS - For repelling Aphids, Armyworms, Earworms, Cutworms, Leafhoppers, Mites, Rootworms, and Thrips.

POME FRUIT TREES - (Apples, Crabapples, Mayhaws, Pears, Quince): For repelling Aphids, Appleworms, Casebearers, Codling Moths, Curculios, Leafhoppers, Leafminers, Leafrollers, Maggots, Mealy Bugs, Mites, Plant Bugs, Psylla, Sawflies, Scale.

ROOT AND TUBER VEGETABLES - (Artichokes, Beets, Burdock, Carrots, Cassava, Chicory, Ginger, Ginseng, Horseradish, Parsly, Parsnip, Potatoes, Radish, Rutabaga, Salsify, Sugar Beets, Sweet Potatoes, Turnips, and Yams): For repelling Armyworms, Beetles, Chinch Bugs, Grasshoppers, Leafhoppers, Leafminers, Mites, Plant Bugs, Psyllids, Rust Flies, Slugs, Symphylans, Thrips, Tuberworms, Weevils, Whiteflies, White Grubs, and Wireworms.

SMALL FRUITS AND BERRIES - (Blackberries, Blueberries, Boysenberries, Cranberries, Currants, Dewberries, Elderberries, Grapes, Gooseberries, Huckleberries, Olallieberries, Pomegranates, Raspberries, Strawberries, Youngberries): For repelling Ants, Aphids, Beetles, Borers, Cambium, Chafers, Curculios, Cutworms, Earwigs, Fruitworms, Grubs, Leafhoppers, Leafminers, Leafrollers, Maggots, Mealy Bugs, Mites, Phylloxeras, Plant Bugs, Rootworms, Sawflies, Scale, Slugs, Spittlebugs, Stem Girdlers, Thrips, Tortrix, Tree Crickets, Weevils, Whiteflies, White Grubs, and Wireworms.

STONE FRUIT TREES - (Apricots, Cherries (sweet and sour), Nectarines, Peaches, Plums): For repelling Aphids, Beetles, Borers, Fruit Flies, Fruit Moths, Leafminers, Mites.

SUGARCANE - For repelling Borers, Delphacid, Lacebugs, Leafhoppers, Mites, Spittlebugs, White Grubs, and Wireworms.

SUNFLOWERS - For repelling Aphids, Armyworms, Beetles, Caterpillars, Cutworms, Grasshoppers, Maggots, Midge, Moths, Thrips, and Weevils.

TROPICAL FRUITS - (Avocado, Bananas, Chermoya, Guavas, Kumquats, Longan, Lychee, Mango, Papaya, Passion Fruit, Pineapple, and Rambutans): For repelling Aphids, Beetles, Borers, Fruit Flies, Leafhoppers, Mealybugs, Mites, Scales, Whiteflies, and Thrips.

TURFGRASS - (Bahlagrass, Bentgrass, Bermudagrass, Bluegrass, Buffalograss, Cetipedegrass, Fescue, Paspalum, Red Top, Rye Grass, St. Augustine, and Zoyslagrass): For repelling Aphids, Ants, Armyworm, Ataenlus, Beetles, Billbugs, Chafers, Chinch Bugs, Crane Fly, Cutworm, Earwigs, Ground Pearls, Grubs, Leafhopper, Mites, Mole Cricket, Spittlebugs, Webworms and Weevils.