

# VAPOR GARD®

**Anti-transpirant concentrate for fruits and vegetables**

**ACTIVE CONSTITUENT: 904.32 g/L di-1-p-MENTHENE**

## **GENERAL INFORMATION**

VAPOR GARD is a water emulsifiable organic concentrate for use on plants to reduce water transpiration. The soft, flexible film formed after the spray application dries, will significantly reduce moisture lost by the plant foliage.

All anti-transpirant spray applications must be applied for full coverage. Spray VAPOR GARD for full coverage or use as a dip. No additional spreader is needed with VAPOR GARD.

Apply VAPOR GARD at least one hour, during daylight, before an anticipated rain. Sunlight for this time period, is needed for the protective film to set. VAPOR GARD dries on plants to form a clear, glossy film which retards normal moisture loss without interfering with plant growth or normal respiration. VAPOR GARD beautifies plants by polishing leaf surfaces.

**Net Contents: 5 / 10 / 20 / 208 litres**

Manufactured by: **Miller Chemical & Fertilizer Corporation**

Hanover, Pennsylvania, 17331, USA.

Distributed in Australia by



**Agspec Australia Pty Ltd**  
ABN 401 095 739 53

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APVMA No: Exempt

## DIRECTIONS

Can Be Used On All Growing Plants Including: Trees (Deciduous and Conifers), Evergreens, Christmas Trees, Shrubs, Turf, Roses, Flowering Plants, Vegetables, Tobacco and Fruit and Nut Trees. Apply VAPOR GARD alone. CAUTION: Do Not apply in spray tank combination with any pesticide, on any crop.

Winter Protection - To reduce winter damage caused by COLD DESICCATION (All Crops): Plant damage frequently occurs during growing seasons when cold weather fronts pass through crop areas. Damage occurs due to cold desiccation and freezing temperatures.

VAPOR GARD will reduce the effects of cold desiccation, but will not prevent damage from freezing temperatures. To reduce the effects of cold desiccation, apply VAPOR GARD in a full coverage spray, at least a few hours before a cold front arrives, while there is still adequate sunlight to set the film.

CROP	RATE	CRITICAL COMMENTS
EVERGREENS - Broadleaf & Needled such as: Azalea, American Holly, Pines, Rhododendron & Yews:	50mL/ 1 L water	One autumn application will last through winter. Clear glossy film will not crack or peel off of foliage Vapor Gard will not alter the varietal temperature adaptation of a plant and therefore will not enable a warm season plant to survive the winter in a cold area. DO NOT use where temperatures drop below -30°C. Most winter damage that occurs at temperatures below -30°C is due to internal ice crystal formation which causes cell destruction and not from desiccation. Any good anti-transpirant which holds moisture in the plant will increase the problem because extra moisture held within the plant keeps the cell solution too dilute and subject to ice crystal formation under very cold temperatures. Many plants are affected by this phenomena. Certain plants may demonstrate a high degree of susceptibility at temperatures above those noted. Before using VAPOR GARD on large numbers of plants, test it under your conditions on a limited number of plants. Due to varietal and environmental variation, results may differ from year to year. CAUTION: Do not use this product on any variety of Arborvitae, Cedar, Cypress, Chamaecyparis, Juniper, Sequoia, Dwarf Conifers, or any other similar plant species. CAUTION: VAPOR GARD, as well as other film forming compounds, will turn blue evergreen species, such as Blue Spruce, green on application. The blue appearance will return with a new season's growth.
FOLIAGE PLANTS grown in subtropical conditions	10mL/ 1 L water	Make two applications about 2-4 weeks apart. The first application should be made just before the first winter cold front is expected.

## TO REDUCE TRANSPLANTING SHOCK TRANSPLANTING & OTHER USES

CROP	RATE	CRITICAL COMMENTS
EVERGREENS & OTHER PLANTS Flowers, Turf, Vegetables (such as Tomato, Pepper, Melons, Cucurbits, Celery, Cabbage, Lettuce), Tobacco, Coffee & Fruit Transplants, Flowering Plants, Evergreen & Deciduous Trees & Shrubs:	100mL/ 4-5 L water	Spray or dip plants before transplanting, to reduce transplanting shock. Use on established plants during growing season to reduce summer scald. Good spray coverage can usually be achieved on low growing plants, such as vegetable transplants, with 1200 L /Ha of spray mix. Be certain the bottoms as well as tops of leaves are covered by spray. VAPOR GARD can be applied to cut Christmas trees to slow the drying process which also reduces the potential fire hazard. VAPOR GARD application soon be used to reduce damage from smog, air pollutants or salt mist from wind blown salt water. CAUTION: For dip applications, maintain agitation by stirring the dip emulsion during the entire dipping period. DO NOT dip plant roots.

PRE-HARVEST SPRAY To improve size, reduce preharvest fruit drop, reduce sunburn incidence, reduce Stayman cracking & splitting & to improve colour in some varieties. Do NOT use in spray tank combinations with any pesticide.

CROP	RATE	WATER RATE	CRITICAL COMMENTS
ASPARAGUS	9.5 L/Ha	950 - 2000 L water/Ha	To reduce midseason fern desiccation. Relieving moisture stress at this time, helps to insure good bud set on the crowns for the next season's crop.
CHERRIES	9.5 L/Ha	2000 L water/Ha	To improve colour, size and to reduce splitting, apply 3 to 6 weeks before harvest. In most cases, 2000 L of water/Ha should be adequate, however, on larger trees more water may be necessary. Flavour may be improved on some sweet cherry varieties. Do Not use in spray tank combination with any pesticide.
CITRUS	9.5 L/Ha	950 - 5700 L water/Ha	To improve storage life through moisture conservation, reduce peel desiccation, and increase size, approximately 2 to 4 weeks before harvest. Apply in adequate water for complete tree coverage, the rate of water/Ha will vary depending on tree size. To improve size, colour, flavour and storage life.
GRAPES	9.5 L/Ha	950 - 2000 L water/Ha	CAUTION: Some adverse colour change has been occasionally noted on girdled Thompson Seedless, which could affect fresh market acceptability. Before using wide scale applications, check the application on a few vines under your conditions. Applications should be applied just before the bunches close.
MANGOES	9.5 L/Ha	950 - 5700 L water/Ha	To enhance red fruit colouration and to improve, storage and shipping quality, apply VAPOR GARD approximately 2 to 4 weeks before harvest. Apply in adequate water for complete tree coverage, the rate of water/Ha will vary depending on tree size.
POME FRUITS Such as Apples & Pears	9.5 L/Ha	950 - 4800 L water/Ha	To reduce Stayman cracking, reduce Golden Delicious Leaf Blotch (Scorch), and to improve colour in some varieties. Make applications before cracking or sunburn conditions occur. For other uses, make application about 4 to 6 weeks before harvest.
ROOT CROPS Such as Potatoes & Beets	9.5 L/Ha	950 L water/Ha	To improve yield of most varieties. Timing for application, on Potatoes, has varied somewhat; however, the most optimum timing is approximately full bloom to 2 weeks after full bloom, or just before the vines drop in the row. Applications made at any time during the bloom period may be helpful. Application on Beets should be made midway in the growing season, usually when 60% or more of the foliage is present. Do Not apply by air as coverage is not adequate enough to show positive results.
STONE FRUITS Such as Peaches, Nectarines & Apricots	9.5 L/Ha	2000 L water/Ha	To improve colour, size and flavour, apply VAPOR GARD 2-3 weeks before harvest. Apply VAPOR GARD in adequate water for good coverage. The application may hasten maturity by approximately 1 to 3 days.
SUBTROPICAL & EXOTIC FRUITS - Such as Avocado, Kiwifruit, Papaya & others	9.5 L/Ha	950 - 5700 L water/Ha	To improve size and moisture conservation, and to reduce fruit drop. Due to varietal differences, test VAPOR GARD on a few plants before starting large scale usage.
VEGETABLE CROPS Such as Tomatoes, Peppers, Melons & other Cucurbits, Beans & others	9.5 L/Ha	950 - 2000 L water/Ha	To help increase fruit size, apply VAPOR GARD in a full coverage spray. This application should be made early in the fruiting season. Frequently, extra benefits can be obtained, such as improved colour on tomatoes and improved flavour in melons

**WATER SAVINGS TOOL:** (All Crops including ROW CROPS such as Cotton)

To partially relieve drought stress and to reduce irrigation, apply VAPOR GARD at the rate of 9.5 -19 L/Ha in adequate water for full coverage. At least 60% or more of the season's foliage should be in place if only one application is to be made. Early season applications are beneficial; however, new growth dilutes the effect of the application, causing the need for additional applications spaced at 4 to 8 week intervals. Due to substantial differences in crops, season and growing areas, local application of this management tool is needed. In general, water needs of the crop can be reduced by 10-30% with a properly adapted VAPOR GARD program.

**MIXING DIRECTIONS:** Fill the spray tank half full with water. Add VAPOR GARD at the half full point while the tank continues to fill. Maintain continued agitation while the tank is filling. To insure good emulsification of this product, it is advisable to pre-mix VAPOR GARD with water before adding to the spray tank. Rinse tank, lines and nozzles immediately after spraying, with water. After rinsing, there may still be a small amount of sticky residue in the tank. This will help to prevent rusting and corrosion. It will not clog nozzles when sprayer is next used. Do not apply to non-target surfaces. If spray happens to land on undesired surfaces, such as windows, cars, application equipment or others, it can be removed with soap and water, before the spray deposit is dry or with premium grade or white kerosene after the film has dried or set. To remove dried deposits from painted car surfaces, use standard tar remover products designed for use on painted car finishes. Spray that lands on porous surfaces such as wooden surfaces, stone, brick, or other surfaces that cannot be practically cleaned as above, may result in an extended or permanent alteration of appearance. Do not spray plant materials located in a manner that makes it difficult to spray the plant without also spraying the background surface. Apply VAPOR GARD only to recommended plant materials.

**VAPOR GARD** will not freeze, foam or clog nozzles. Use this product in accordance with good agronomic practices, which include utilizing proven spray equipment set for proper coverage. Do not make applications when temperatures are too hot. Applications should be made at temperature levels and when other environmental conditions in your area are such that your experience indicates the application will be compatible and will accomplish the desired result. The use of this material being beyond our control and involving elements of risk to human beings, animals and vegetation, we do not make any warranty, express or implied, as to the effects of such use, when this product is not used in accordance with the directions as stated on this label.

**SAFETY DIRECTIONS:** Avoid contact with eyes, skin and open wounds. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

**FIRST AID:** If poisoning occurs, contact a doctor or Poisons Information Centre Phone 131126. Refer to Material Safety Data Sheet for further information.

**CAUTION - KEEP OUT OF REACH OF CHILDREN**

**Liability:** This product must be used strictly as directed. May not be liable for loss or damage arising from failure to follow directions for use.

**BN:**

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