

# VapourShield

## Anti-Transpirant & Turf Conditioning Aid



### Product Overview

#### **VapourShield Anti-transpirant**

VapourShield is a water emulsifiable polymer concentrate. It is used on plants to reduce water transpiration and protection from climatic extremes. The soft, flexible film formed after the spray application dries, will significantly assist in the reduction of moisture loss from the plant foliage in times of stress. VapourShield has a use within Turf maintenance to reduce cold desiccation, drought and heat stress. It also plays a useful role as a harvest tool in turf production to reduce degradation of cut turf. VapourShield also reduces transplant shock and prevent cold desiccation in a range of ornamental plants.

### Key Features

- > Improves plant performance in cooler conditions.
- > Reduces irrigation requirements.
- > Improves plant health, and overall aesthetics.
- > Reduces turfgrass and ornamental plant shock when transplanting stock.
- > Improves post-harvest quality in turf production situations and during transport.
- > Minimal impact on plant growth and respiration.
- > Reduces the impact of summer stress.



### VapourShield – Use Rates & Label Recommendations

CROP	RATE	COMMENTS
<b>Ornamentals &amp; Landscape Plants</b> Flowers, flowering plants, evergreen & deciduous trees & shrubs	100mL/4-5L water	<b>Winter Protection – To reduce winter damage caused by COLD DESICCATION (All turf and Ornamental situations):</b> Damage occurs due to cold desiccation and freezing temperatures. VapourShield will reduce the effects of cold desiccation, but will not prevent damage from freezing temperatures. To reduce the effects of cold desiccation, apply VapourShield 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.  Spray or dip foliage before transplanting, to reduce transplanting shock. Use on established plants during the growing season to reduce summer scald. Good spray coverage can usually be achieved on low growing plants with 1200L/ha of spray mix. Be certain the bottoms as well as tops of leaves are covered by spray. Caution: For dip applications, maintain agitation by stirring the dip emulsion during the entire dipping period. DO NOT dip plant roots or wash/spray VapourShield solution into the root zone.
<b>Turf Production</b> Reduce harvest stress and improve re-plant establishment	5-10L in a minimum of 500L of water per hectare	Spray foliage before transplanting, to reduce transplanting shock. Use on established plants during the growing season to reduce summer scald. Be certain the bottoms as well as tops of leaves are covered by spray. Ensure thorough coverage of the turf (500-1000L/ ha). Application should be at least 24 hours before turf harvest to ensure adequate drying time and for the film to set. Improved results are obtained when Kelp based products are applied at 3-5L/ha with the VapourShield application. This should reduce turf stress during transportation and improve turf establishment. Note: Ensure turf being treated with VapourShield is not stressed (high or low temperatures or lack of water or waterlogging) before application. It is important to maintain adequate soil moisture prior to and post application of the anti-transpirant.
<b>Turf Maintenance</b> Including turf farms, golf courses, bowling greens, ovals and other recreational grounds	10-20L in a minimum of 500L of water per hectare	To reduce drought & heat stress and to reduce irrigation requirements in turf situations, apply VapourShield at the rate of 10-20L/ha in adequate water for full coverage. For improved results, split applications (5L/ha) at regular intervals (following mowing) provides a more effective result. Early season applications are beneficial however, new growth dilutes the effect of the application, causing the need for additional treatments spaced at 2 to 4 week intervals. Due to substantial differences in turf situations and growing conditions, local application and adjustment to the use rates and regime of use with this management tool maybe required. In general, irrigation requirements of the turf can be reduced by 10-30% with a properly adapted VapourShield program.

### Mode of Action

The active ingredients in VapourShield are non-toxic, film-forming short chain polymers called Cyclohexane polymers. These polymers mechanically limit plant transpiration without hindering normal plant function. Cyclohexane polymers are derived from specific fractions of pine resin materials. The cyclohexane polymers in VapourShield when sprayed on the leaf surface and exposed to sunlight and air, undergo a process of polymerisation to form longer chain, higher weighted molecules.

After the water applied with VapourShield evaporates, a soft, flexible, multi-layered film is formed which degrades slowly over time, layer by layer. The film provided with VapourShield mechanically limits plant transpiration and moisture loss, providing a range of plant benefits including improvements in heat, drought, transplant and cold desiccation stress.

### Maximising performance

- > Do not add any additional Adjuvants when using VapourShield. They are not necessary.
- > Do not apply in spray tank combination with any pesticide, on any crop.
- > Don't dip plant roots or wash/spray VapourShield solution into the root zone.
- > In turf maintenance, early season applications are beneficial; however, new growth dilutes the effect of the application, causing the need for additional treatments spaced at 2 to 4 week intervals.
- > In turf production, ensure thorough coverage of the turf (500-1000 L/ha). Application should be at least 24 hours before turf harvest to ensure adequate drying time and for the film to set. Improved results are obtained when Kelp based products are applied at 3-5 L/ha with the VapourShield application.
- > In ornamental plant situations, good spray coverage can usually be achieved on lower growing plants with 1200 L/ha of spray mix. Be certain the bottoms as well as tops of leaves are covered by spray.