# **Turf Aid** 3 Part Plant Enhancement Aid for Turf Product Overview



Turf Aid is a unique 3 part, liquid additive used to act as a visual spray application aid with a range of turf management products.

In addition, the macrocyclic compound called phthalocyanine within the product also assists in protecting turf against UV radiation and excessive light intensity.

The new generation APG surfactant in the formulation assists in improving coverage, uniformity, deposition and provides rainfast properties to the product and it's tank mix partners.

Finally, the product contains Plant Elicitors which enhance the plant's immune response to plant stresses.

### **Key Features**

- > Multiple benefits in the one product.
- > Improves plant health, particularly during stressful growing conditions.
- > Enhances turf colour and aesthetic appearance. Helps to improve uniformity of colour.
- Field trials have shown an increase in root >development with continued use of the product.
- The product is generally rainfast within 1 hour of > application.
- Cleans easily from spray equipment and is soft on >pump seals.
- Premium quality, water based formulation. >
- >Tank mix compatible formulation. Can be tank mixed with a very broad range of turf management products.
- > Formulated and manufactured in Australia.



# Untreated





### Turf Aid – Use Rates & Label Recommendations

SHUATION	
Turf	
(eg. Lawns,	
commercial turf	
farms, parks,	
recreational areas,	
bowling greens,	
sports fields, golf	
clubs)	

RATE Turf cut under 12mm: Apply 300mL-1.2L per hectare in a minimum of 300-400L of water per hectare. Use higher rates for a darker green colour or at higher heights of cut.

**Turf cut higher than 12mm:** Apply at a rate of 1-2L per hectare in a water volume of 250-500L per hectare. For better coverage apply 500mL-1L per hectare in two directions (90° opposite directions).

### **CRITICAL COMMENTS**

Apply at approximately 2-3 week intervals during the main growing season and at 4-6 week intervals when turf growth slows and mowing frequency lengthens. For best results apply after mowing.

Do not leave the spray liquid in the sprayer for long periods (eg. such as during meal breaks >1 hour). Make up solution as required for immediate use.

## **Modes of Action**

### **Elicitors of Plant Response**

Turf Aid possesses elicitors within the formulation that assist to induce systemic acquired resistance (SAR) in response to stress events from poor growing conditions including drought, heat and plant pathogen infection. Infected or invaded cells in plants generally produce salicyclic acid naturally within the plant, which then serves as a genetic signal to turn on localised production of antimicrobial compounds. The infected leaf cells are killed, along with the invading pathogen (due to limited food source), which limits spread of the disease. By artificially inducing these responses within the plant, we can better enhance plant response to stress events and reduce potential for secondary infection.

### **Spray Application Aid**

The Phthalocyanine in the product is very similar in chemical structure to naturally occurring compounds such as chlorophyll. As a consequence, the phthalocyanine absorbs light strongly in the UV spectrum that is required for photosynthesis, but blocks and filters UV radiation and excessive light intensity that can cause problems with turfgrass resulting in photo-inhibition.

### In-built Surfactant

Turf Aid contains a new generation Alkyl Polyglucoside (APG) Surfactant. These surfactants are made from a sugar molecule reacted with a fatty acid and are considered naturally derived surfactants. The APG surfactant in the formulation maximises deposition, uniformity, coverage and rainfast properties of the product and it contents. It also offers similar properties to its tank mix partners.





Hong Kong | Singapore | Malaysia | Australia Email: info@centaur-asiapacific.com Website: www.centaur-asiapacific.com



### Mixing Procedures with Turf Aid

Step 1	Water goes into the tank first. Fill the tank at least $\frac{1}{2}$ full and start agitation.
Step 2	ADD TURF AID (allow to fully disperse into the water solution)
Step 3	Add water conditioners (e.g. Ammonium sulphate, acidifiers).
Step 4	Water Soluble Packages (WSP's)
Step 5	Water Dispersible Granules (WG / WDG's)
Step 6	Wettable Powders (WP's)
Step 7	Suspension Concentrates (SC's)
Step 8	Oil in Water Emulsions (EW's)
Step 9	Oil Dispersions (OD's)
Step 10	Emulsifiable Concentrates (EC's)
Step 11	Soluble Concentrates
Step 12	Grenadier 800WG Fungicide
Step 13	Liquid Fertilisers
Step 14	Spray adjuvants (including Octane Non-Ionic Extender, Sticker, Spreader).
Step 15	Fill remainder of the spray tank and with water to the desired volume.

