

Making light work

The fusion of
science and nature



syngenta®

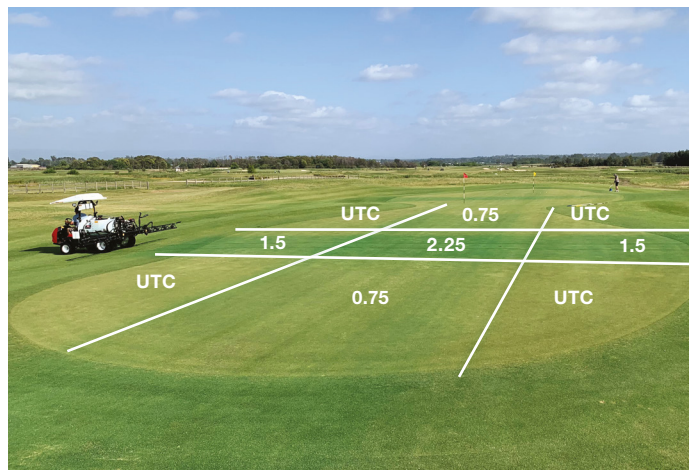
• Ryder UV Filter

®

What is RYDER®?

RYDER® Turf Pigment provides your turf a deep natural green colour with flexibility to manage the colour intensity to suit your turf situation and needs.

At the same time, RYDER® is working within the plant providing plant health benefits for both cool and warm season turfgrass.



Improved plant health

Enhanced turf appearance

KEY
BENEFITS

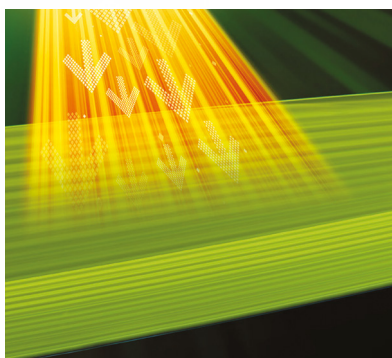
Protects against harmful UV rays
and light stress

Provides natural consistent
green colour

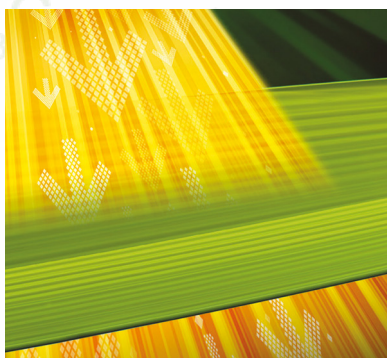
How RYDER® works

RYDER® is a green coloured phthalocyanine compound with a structure similar to the chlorophyll molecule. RYDER® absorbs, reflects and transmits excessive and harmful UV light, supporting the plants naturally produced pigments that reflect, scatter and screen radiation damage.

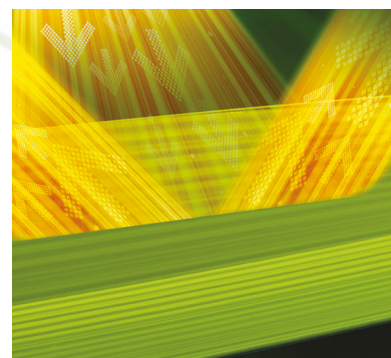
Using the latest generation of pigment technology, at a high concentration, RYDER® can effectively mimic naturally produced turf pigments and deliver protection against harmful UV radiation and high light intensity.



Absorbed



Transmitted

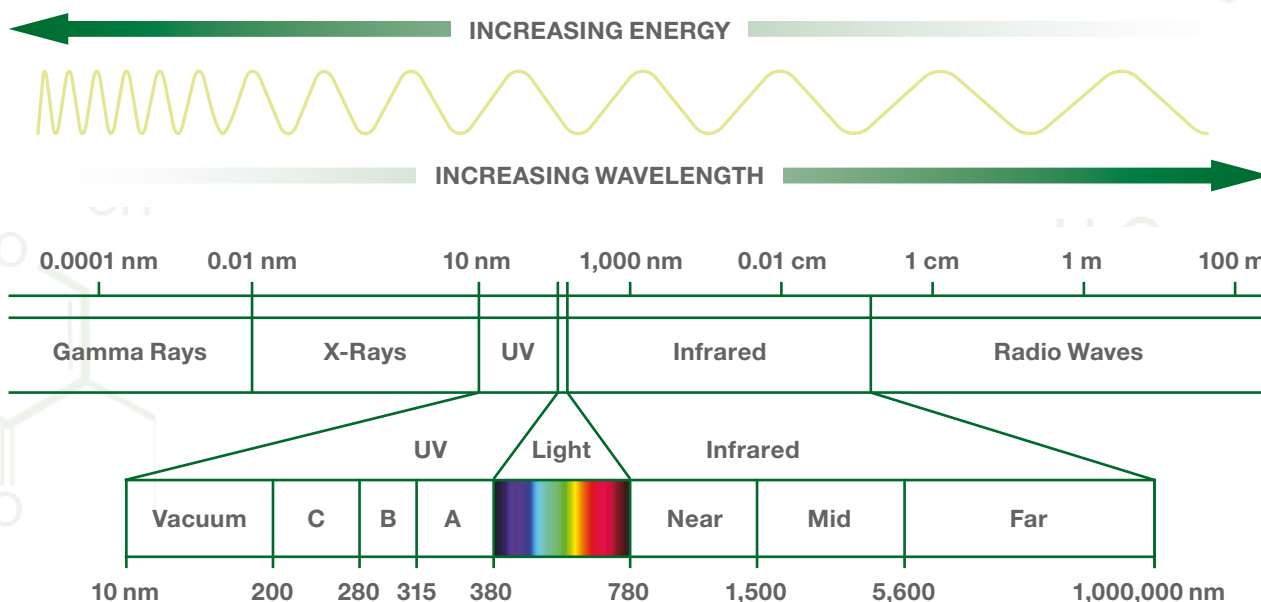


Reflected

Science behind photosynthesis

All plants need the right amount of sunlight in the specific wavelength for growth. Only PAR light (photosynthetically active radiation, 400 – 700 nm) will drive photosynthesis.

The challenge for turf managers throughout the year is receiving the optimum amount of sunlight due to changes in seasons. During low light periods, plants are unable to attract enough PAR light to photosynthesise efficiently. During periods of excessive light, plants are exposed to harmful UV radiation. This causes free radicals to damage the plant, inhibiting photosynthesis.

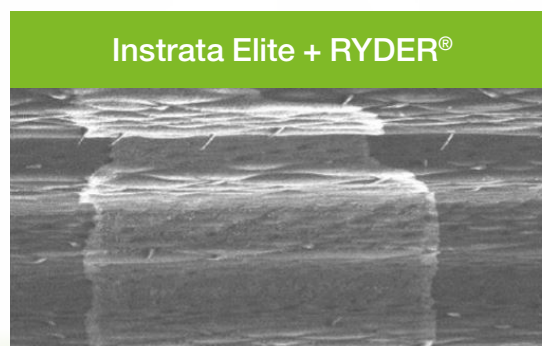


Fusing science and nature

When turf experiences light stress, it naturally creates extra pigments to absorb excessive light ensuring the plant remains healthy. RYDER® replicates these naturally occurring pigments, maximising the plants ability to photosynthesise whilst delivering protection against harmful UV radiation and high light intensities. By harnessing nature's own responses, RYDER® delivers healthy and natural looking turf for optimum quality on a year-round basis.

Effective tank mix




RYDER® is an effective mixing partner with foliar fertilisers delivering better turf quality than either product alone. It is a safe mixing partner with the Syngenta pesticide range delivering improved coverage across the leaf.



Reference: Jealotts Hill, 2018

Application details and timing

Use higher rates for deeper green colour, higher heights of cut and greater protection against associated UV light stress. The instant colour provided by RYDER® can act as a spray pattern indicator in itself, especially at higher rates or on turf inherently paler at the time of application. For even coverage always apply using Syngenta XC Nozzles, operated at 50 cm nozzle tip height and at a water volume of 250 – 500 L/ha. Two sprays at half rate, applied in different directions, can achieve better coverage on turf leaves managed at higher heights of cut. Rainfast in 1 hour.

Timing (Greens)	Product rate	Water volume	Nozzles	Frequency
Summer Apply from December through to March	0.75 – 1.5 L/ha	250 – 500 L/ha	04 XC 	Re-apply every 2-3 weeks as appropriate
Autumn / Winter Apply from March through to August	0.75 – 1.5 L/ha	250 – 500 L/ha	04 XC 	Apply 2-3 applications every 4-6 weeks depending on growth rate
Spring Apply from September through to November	0.75 – 1.5 L/ha	250 – 500 L/ha	04 XC 	Apply 2-3 applications every 3-4 weeks depending on growth rate

Situation	Examples	Application rate
Turf mowing height under 12 mm	Greens, tees, approaches, bowling greens, cricket squares	0.75 – 1.5 L/ha
Turf mowing height above 12 mm	Fairways, sports fields, cricket outfields	1.0 – 2.0 L/ha

Summary of benefits

- Enhanced natural colour and aesthetics
- UV protection through reflection of damaging light component
- Reduced turf stress and better turf health
- Increased light absorption/reflectance or damaging light waves
- Increase surface temperature during cooler periods
- Safe tank mix partner