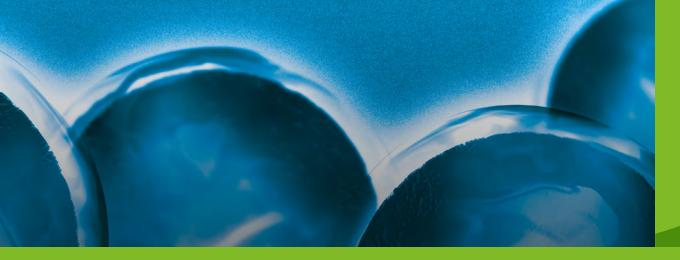
QUALIBRA® Soil Wetting Agent: Derived from deeper science

A powerful curative and lasting preventative wetting agent that:

- is a 100% blend of proprietary non-ionic surfactants; with no water added
- · maintains firmer surfaces
- · encourages healthier, deeper root mass
- · recovers turf faster from periods of stress
- increases water availability
- · reduces plant stress
- reduces effects of drought conditions
- prevents dry patch occurring
- · improves turf colour and quality

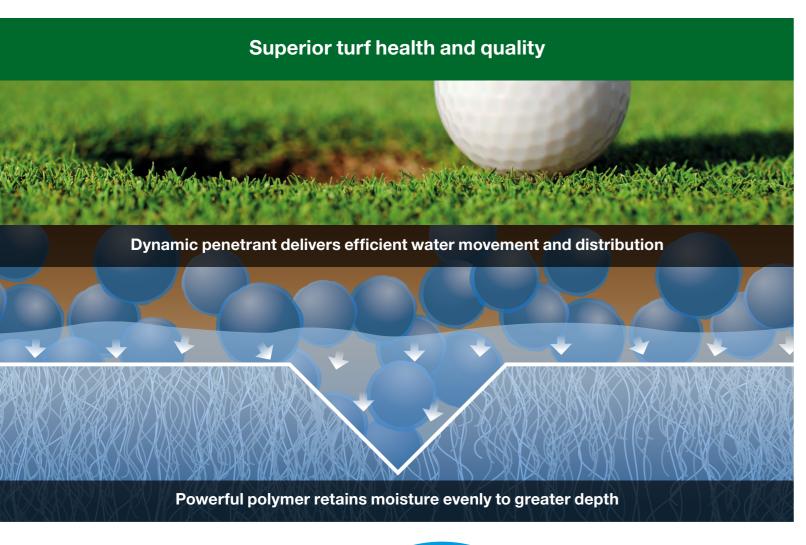




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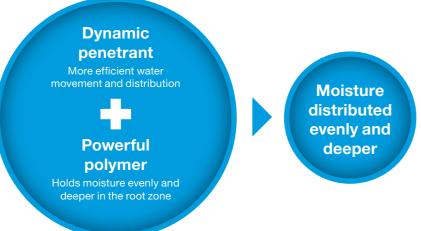
Derived from deeper science; providing maximum flexibility

QUALIBRA® Soil Wetting Agent from Syngenta Turf & Landscape, is a new generation wetting agent designed to provide Turf Managers with increased flexibility when managing soil moisture levels in turf and landscape situations. QUALIBRA® is 100% wetting agent; with no water added. It is a blend of proprietary non-ionic surfactants selected to move water into the soil profile, whilst improving water retention capabilities, ensuring continuing re-wetting for improved plant health. Working in combination, QUALIBRA® can be used in either curative or preventative situations – distributing water deeper and evenly in the profile to prevent and cure dry patch concerns, whilst assisting in root and overall plant health.



How it works:

Water quickly moves away from the surface and is held evenly at a greater depth within the root zone. This dynamic wetting agent provides two-way action; it penetrates and holds moisture deeper and more effectively. Delivering superior turf health and quality.



The problem

Localised Dry Spot (LDS) occurs when waxy coverings coat the surrounds of soil particles, typically in periods of extended dry weather. This impacts the ability of a water droplet to stick to the soil particle (adhesive force) and then spread evenly across and through the soil profile through attraction (cohesive force). Excess organic matter levels at the surface can also impact the evenness of water penetration. Which is why LDS occurs in irregular shaped patches.



Localised Dry Spot

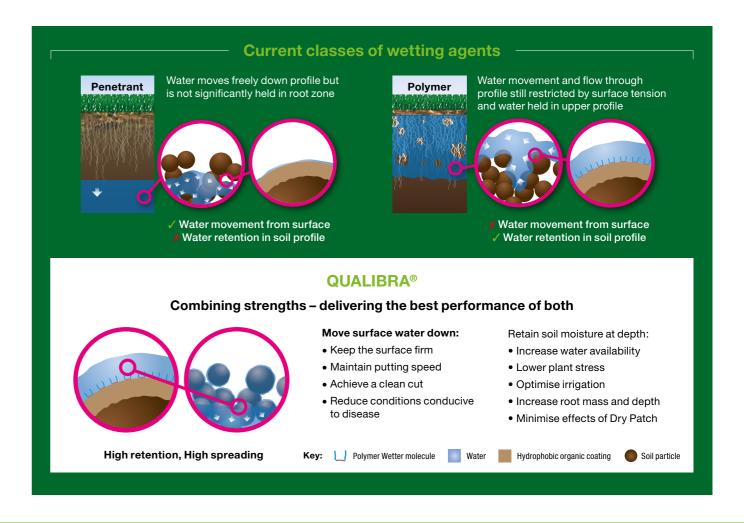
The cure

Wetting agents overcome the challenges of LDS management. They work by breaking down the various impacts that soil hydrophobicity has on water movement and associated impacts on plant growing conditions.

The development of wetting agents has evolved significantly since their introduction into the turfgrass market in the mid-1950s. But it is important to understand that not all wetting agents do the same thing – the different molecules within blends all react differently in the soil profile, both in terms of movement and of water management based on their composition.

Penetrants exist in a number of forms, but when used on their own have a very limited ability to retain moisture in the profile. Their main role is to move water into a surface profile guickly and evenly.

Retentive molecules such as polymers move vertically in the profile and have been shown to increase volumetric water content deeper in a sand profile by 25% at 150 mm and 30% at 250 mm. However, they have limited penetrating properties and need to be positioned correctly to provide best results.



QUALIBRA® has been extensively tested at leading independent universities and research facilities globally. By moving water evenly into the profile from the surface and holding it in place, QUALIBRA® has been shown to:

- deliver superior turf health and playing surface quality
- prevent dry-patch from developing
- improve the use of irrigation resources
- maintain a healthy root mass
- be suitable for all turf surfaces, including greens, fairways, racetracks and sportsfields

The flexible rates of QUALIBRA® makes it easy to include in agronomic programs, helping you to provide the very best in either turf surfaces or ornamental situations. The ongoing formulation development by Syngenta now offers a scientifically proven solution for soil moisture management as part of your ongoing programs.



Application summary

Frequency: Monthly or as required as part of an agronomic program.



Turf surfaces: 10 – 20 L/ha Landscape situations: 20 mL/10 L



400 – 1000 L/ha



Sufficient to incorporate into the root zone, minimum 2 mm



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