

**mineral  
magic***Making soils better & wetter - permanently*

## Mineral Magic & Sports Ovals

### Improved Soil Structure:

Amorphous silica helps in improving soil structure by enhancing soil particle aggregation. This leads to better aeration and drainage, crucial for the high-traffic areas of a football oval.

Improved soil structure also supports root growth and reduces soil compaction.



### Enhanced Root Development:

Silica stimulates root growth, resulting in a denser and more robust root system. This is vital for establishing strong turf that can withstand the heavy use of a football oval. A healthy root system also helps the turf recover quickly from damage.

### Disease and Pest Resistance:

Silica enhances the turf's resistance to diseases and pests. By forming a physical barrier within the plant tissues, silica makes it harder for pathogens to invade and cause damage. This

reduces the need for chemical treatments and helps maintain a healthy playing surface.

### Increased Nutrient Availability:

Amorphous silica improves the soil's cation exchange capacity, which enhances nutrient retention and availability. This ensures that the turf receives essential nutrients, promoting healthy growth and reducing the need for frequent fertilization.

### Drought and Stress Resistance:

Silica helps the turf resist drought and other environmental stresses by reducing water loss through transpiration and improving water use efficiency. This is particularly beneficial for maintaining a green and resilient playing surface during dry periods.

### Wear and Tear Resistance:

Football ovals experience significant wear and tear due to constant foot traffic and play. Silica strengthens the turf, making it more resistant to abrasion and physical damage. This prolongs the life of the turf and reduces the frequency of turf replacement.

### Enhanced Turf Replacement Success:

During turf replacement, incorporating silica into the soil can improve the establishment and growth of new turf. Silica supports root development and overall plant health, leading to faster and more successful turf establishment.

### pH Stabilisation:

Amorphous silica can help stabilize soil pH levels, ensuring that the soil remains within an optimal range for nutrient availability and turf growth.

### Environmental Benefits:

Using amorphous silica in turf maintenance can reduce the need for synthetic fertilizers and pesticides, leading to more sustainable and environmentally friendly practices. It also minimizes the risk of nutrient runoff and groundwater contamination.

Overall, amorphous silica enhances the soil profile of a football oval by improving soil structure, promoting healthy root development, increasing resistance to stress and disease, and supporting successful turf replacement. This results in a durable, healthy, and resilient playing surface capable of withstanding the demands of football activities.