

SOIL-TAC

(ST 8)

SOIL-TAC, or ST 8 evolved during the mid 1990's under a West Australian environmental research company's program to develop a natural, environmentally friendly, organic polymer compound with superior soil stabilisation properties to replace conventional hydro mulching. The result was **SOIL-TAC**. This product is a highly researched mixture of organic polymers and harmless naturally occurring inert minerals. It has many applications but was formulated primarily as a soil binding or stabilising agent. It also has the ability to restrict evaporation from bare soil or established turf without affecting the environment.

When broadcast dry or in solution dissolved and watered onto a newly seeded or stolonised area, **SOIL-TAC** forms a strong polymer membrane within the top 10-15 mm of soil, effectively bonding topsoil particles and fibres together. This membrane, whilst strong and durable is also quite *flexible*. It will assist water and air to penetrate downwards but its capillary nature will restrict evaporation by up to 40%. If the membrane is damaged due to inadvertent traffic or other surface disturbances and provided the physical damage is not too severe, it will self-repair with the next irrigation or rainfall. Established turf areas which receive limited or intermittent irrigation (such as golf course roughs) can be treated to cut evaporation rates almost in half.

Sand bunker faces on golf courses can be treated with **SOIL-TAC** to prevent slippage, wind and rain erosion and to restrict drying out. Simply mix the powder into dry sand, irrigate well and shape onto the desired face. A light compaction and further watering will then firm the surface such as to allow balls striking the face to run back into the bottom of the bunker. The sand face will then be held firm even in the heaviest tropical downpours or winds. The sand however remains workable with conventional bunker tools and the membrane re establishes with the next rain or watering.

An area once treated with **SOIL-TAC** must be allowed to dry out for about 12 hours in order to allow the membrane to set before further irrigation (or rainfall) can be applied. Once the membrane is set, it will not dilute or dissolve further with subsequent watering, no matter how heavy. The **SOIL-TAC** "*in-soil*" membrane which is actually a gelatinised 10-15 mm layer of the topsoil has excellent wind erosion resistance capabilities due to its weight. Conventional paper hydro mulch crust is light and can easily break up and blow away.

SOIL-TAC has a useful life of three to six months when it biodegrades to become a vital source organic carbon, which assists in the uptake of available nutrients. Seeds sown prior to stabiliser treatment can germinate un-hindered within their seed bed which has now become the actual mulch holding moisture and nutrient near the surface where it is needed. Seedlings do not have to break through a surface crust or have the roots make a transition into another growth medium as is the case with conventional paper hydroseeding. To use the product as a hydroseeding medium in a watercart it is advisable to use a small amount of paper (5-10% of conventional rate) just to hold the seeds in suspension as the **SOILTAC** will dissolve completely in water with just a slight thickening effect.

APPLICATION

- Apply dry mixed with fertiliser / sand or dissolved in solution @ 500 kg per ha for normal areas.
- In areas of extreme exposure to constant erosion. the rate can be increased proportionately up to 1,000kg per ha.
- For use in golf bunkers, apply and mix well into dry sand at 200 - 500 gm per sq metre depending upon slope, exposure and depth of mixing.
- **SOIL-TAC** is a white powder material which is naturally clear when mixed with water. Added dyes can be used to achieve a visual effect.
- Can be used to control dust in on construction and roadwork's sites. Apply in water carts @ 50 kg per ha. Once the water has evaporated **SOIL-TAC** reduces dust by coating dust particles.
- Available in 20 kg, or 500kg bulka bags.