

Preparation and mixing details for ST8 Soil-Tac (sand bunkers)

About Soil -Tac:

ST8 Soil-Tac presents as a fine white powder which when mixed with soil or sand and moistened with water, forms a gelatinous or “rubbery” type membrane that bonds soil particles together against wind and rainfall erosion. It is an organic polymer extract mixed with special inert minerals to enhance performance, and is totally harmless to the environment. The ST 8 stabilization properties will remain intact in the soil from 6 to 12 months depending on severity and consistency of mechanical or meteorological wear factors. Soil-Tac will also help stop golf balls lodging in the bunker-face (pug lies) as they tend to “bounce” off treated surfaces and roll back into the bottom of the bunker

The product is packed in 20 kg lined paper sacks for ease of handling.

As a basic rule of thumb, the application rate is 5 kg of Soil-Tac per 1 cubic meter of bunker sand. This rate applies to non porous, silica type sands of fine to medium texture (USGA spec). Marbleite, crushed shale type, or porous bunker sands which tend to absorb moisture and usually consist of larger more uniform particle size will require up to 15 kg per cubic meter to be effective. Basically the larger the particle size the more Soil-Tac per cubic meter will be needed. There is no hard and fast rule to adhere to with application rates and the client will need to determine a “*feel*” for the best rate, based on given conditions for their particular site and level of stabilization control required.

It is recommended to divide one “experimental” bunker into various plots and use it to determine the correct rate based on the above information, before proceeding to treat others. This exercise is time consuming but well worth the effort to ensure maximum benefit and economy for your Soil-Tac investment.

Methods for integration of **ST8 Soil-Tac** (Bunkers):

There are three methods for application of ST8 into sand bunkers:

- 1 Pre-mixed with sand prior to placement into bunker recesses
- 2 Spread and worked in as a dry powder into existing sand bunkers
- 3 Dissolved in a water solution and sprayed directly into bunkers

Each of these methods is discussed in order of effectiveness

ST8 Soil-Tac Application details (bunkers):

1: Pre-mixed with bunker sand:

This is the most positive and effective way to introduce ST8 to your bunker. Simply allocate the appropriate amount of dry Soil-Tac powder per cubic meter of dry bunker sand and mix thoroughly prior to locating sand in the bunker recess. Mix well otherwise clumping will occur.

Once sand is placed in the bunker and roughly shaped up, thoroughly wet the sand with irrigation. Make sure all of the sand mix is wet before proceeding with final shaping and grooming. Allow the bunker to dry out for 12 to 24 hours to allow the membrane to form before rainfall or subsequent irrigation.

2: Applied as dry powder to existing bunkers:

This is the most common method used when a bunker is already in play. It is preferable to have the Soil-Tac as deep as possible in the bunker sand so that when the sand is worked by golfers with bunker rakes and re-groomed by ground staff, the soil remains evenly blended with Soil-Tac. First determine how deeply you are able to work in the product and calculate that cubic measurement of sand. Spread the appropriate quantity of dry Soil-Tac evenly over the surface and work it into the sand using rakes and shovels to the pre determined depth. Thoroughly wet the sand with irrigation or rainfall and groom to final shape as discussed above. Allow 12 to 24 hours to dry out and allow the membrane to form before further rain or irrigation.

3: Dissolved in water:

This method is perhaps easier but not as effective as the other methods above because it does not achieve an effective infiltration of Soil-Tac to deeper levels. It may have to be re-applied every 3-6 months. Soil-Tac is wettable but will require vigorous agitation to make sure it is all dissolved with no lumps. Once again calculate the volume of sand which you feel the water and Soil-Tac solution will penetrate. Allocate the appropriate amount of product and dissolve in cool water at the minimum dilution rate of 10 liters per kg, but it is best to use as high a dilution as possible to achieve a deeper penetration of product. The solution should be applied slowly to a shaped bunker at low pressure through a large nozzle. The bunker can then be groomed to final playing condition. Allow to dry as above.

To achieve a higher level of protection against rainfall erosion, smooth out and pat down flashed (sloped) bunker faces. This also helps prevent "poached-egg" ball lies in the bunker face.