

**Presque Isle Wine Cellars
9440 Buffalo Road (US 20)
North East, Pa 16428**

Chinosol [8-Hydroxyquinoline Sulfate] [C₁₈H₁₆N₂O₆S]

Treatment of stocks and scions prior to grafting

To inhibit *Botrytis* infection, soak propagating stock in a 0.5% solution of Chinosol in water for a maximum of 5 hours. The Chinosol solution may be reused at least 3 times before being it loses effectiveness and must be discarded.

- An 0.5% solution is made by adding 5 gm of Chinosol to 1 liter of water (or 19 gm per gallon.)

Treatment of grafts in the callusing box

The small leaves that start from the grafts can be protected from *Botrytis* by spraying or irrigating with a 0.1% Chinosol solution. Do not apply under direct sunlight.

- An 0.1% solution is made by adding 1 gram of Chinosol to 1 (one) liter of water (or 3.8 gm per gallon.)

Other applications of Chinosol

The grafting or callusing room may be sprayed with a 0.1% Chinosol solution to inhibit *Botrytis*. Chinosol may be added to grafting wax by heating the wax to 82°C (180°F) and stirring in the 3-5 gm per kilogram of wax (1.4-2.3 gm per lb.)

- Chinosol is a topical antiseptic, antiperspirant and disinfectant. It is a pale yellow crystalline powder with an odor of saffron. It gives a burning sensation when tasted, but will not cause tissue damage.

Directions for use of Grafting Wax

- Heat the wax to 63-65°C (136-140°F) in a pan over electric heat or in a double boiler. **Do not heat over an open flame.** Do not allow the temperature of the wax to exceed 80°C (176°F) when dipping plant materials into it.
- Dip completed graft in wax far enough to cover the graft union. Do not hold the graft in the wax bath for more than 2-3 seconds.
- Immediately dip graft in cold water. The graft is now ready for placement in the callusing box. This treatment gives greater rigidity to the grafts, but you must still use care in handling to avoid damage to the uncallused graft union.
- Dipping rooted grafts in wax prior to planting in the field will increase their ability to withstand desiccation. Damage to buds and exposed green parts of the graft will occur at temperatures above 70°C (158°F).