

Controlled Release Technologies

Cooler Guard Usage Instructions

Cooler Guard has been shown to actually clean off old scale from cooler interiors and pads, and many users have reclaimed pads that they normally would have thrown away.

The First Step

Prior to starting the evaporative cooler's treatment, flush out the sump and clean it, removing any accumulation of dirt and other debris. Then spray the unit with Fast Attack HVAC System Sanitizer, which EPA registered for use in evaporative coolers.

Pour the 8 ounce bottle of concentrate into a 2.5 gallon pump-up sprayer, and spray all interior sections of the cooler, including pads. Any residual product doesn't need to be drained, and can be left in the cooler water. Fast Attack is an iodine-based material and will quickly revert to iodine, an innocuous material.

The sump must be flushed out so that you now only have fresh water in it.

The Second Step

The unit is now ready for Cooler Guard. remove Cooler Guard from the box and/or plastic bag. The polyester fabric enclosure must be kept intact. Place Cooler Guard in the wet section, and close the cooler.

The Third Step

Close down the bleed off. You no longer need to waist a lot of water to have an efficient cooler. Closing down the bleed-off also helps keep Cooler Guard's ingredients n the correct ratio so it will perform correctly.

Monitoring the System

After four or five weeks have passed by you may see that the cycles of concentration have gone past 40. In this event, yo would bleed off water until you reach 5 cycles or so, and then you would let the water build back up again. Cycles will build up as a function of operational times and outside temperatures, which of course will influence evaporation and make-up. It is normal for the reticulated water to be a elevated pH levels of 8 or 9, this is common.

Replacement

At the end of six weeks discharge the sump water and remove the spent Cooler Guard from the sump. Follow steps one,two, and three again.

Important

Make sure that fresh water is in the sump when you start another application. Check this by measuring the conductivity of the sump water and the conductivity of the fresh make-up water coming from the float valve assembly. The numbers should be exactly the same. If they are not, then the sump must be flushed.

Cycles Of Concentration Work Like This

Consider a one gallon container on a stove. Let's say the conductivity you measure is 500 units.

Boil half of the water away so you have only a half gallon left.

Measure the conductivity and you will see that it is now 1,000. The regular water is 500, so if we divide 1,000 by 500 we get two, which represents two cycles of concentration.

Continue boiling the water and evaporate it down to one quarter of a gallon. Measure the conductivity, and you will see it is now 2,000. Dividing 2,000 by 500 (the original water concentration) you will see you have the result of four, which is four cycles of concentration.

Notice that now you only had to boil one quarter of a gallon away to double the concentration from 1,000 to 2,000.

Now, evaporate off half of the remaining quarter gallon and guess what? Measure the conductivity and you will see that you have doubled from 2,000 to 4,000 and are now at 8 cycles of concentration.

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www.cleanac.com P) 800.766.9057 F) 727.573.5344 custserv@cleanac.com