

Cooler Guard

Timed-Released Protection for Evaporative Coolers Application Guide

Cooler Guard is used by commercial businesses, medical facilities, government buildings, airports, hotels and resorts, schools, and industrial buildings to maintain clean filter pads in Evaporative Coolers (aka Desert Coolers, Swamp Coolers).

The typical evaporative cooler uses a fan to draw outside air through wet filter pads. This filters the air of impurities and lowers the air temperature due to the evaporation of water within the pads. The cooled air is then distributed or directed into the building. The filter pads are wet by a pump which pumps water up from a water basin / sump to the top of the pads, from where it trickles down to the water basin / sump.

Because water continuously evaporates, the impurities and minerals in the recycled supply water gradually increase in concentration, which precipitates out on the pads as scale and sludge deposits. The continuing buildup of scale reduces airflow, gradually lowering the performance of the evaporative cooler. Most modern evaporative coolers will automatically 'bleed-off' (or drain) small amounts of water. Replacement with fresh make-up water reduces the amount of dissolved solids, suspended solids and salts in the circulating cooling water.

Cooler Guard's time-released active ingredients dramatically raise the precipitation point of the dissolved solids (less scale deposits) and also clean sludge from the filter pads (clean pads). **Cooler Guard helps to continuously clean filter pads, eliminates scale deposits, maintains energy efficiency of the unit, and reduce sludge buildup in the water basin / sump.** The 'bleed-off' can be adjusted as required to reflect the improved system performance and hygiene.

Product size selection:

Use the recommended size of Cooler Guard for your application. Cooler Guard life span varies with cooler usage, water quality, and other environmental factors. **Use the table below as a guideline** for selecting the appropriate size of Cooler Guard based on your evaporative cooler system capacity in Cubic Feet per Minute of air, CFM.

Code #	Treatment (CFM)	Life Span Interval	Unit Dimensions
E2000	2,000	2 months	3.8cm x3.8cm x15cm
E4000	4,000	2 months	3.8cm x3.8cm x30cm
E10,000	10,000	2 months	3.8cm x3.8cm x60cm
* see note below	> 10,000	2 months	* see note below

* Note: Multiple Cooler Guard may be combined to achieve additional CFM configurations.

Product Installation:

Consult the product MSDS (Material Safety Data Sheet) for additional handling and safety information.

If using Cooler Guard for the first time on a dirty system, the cleaning action of Cooler Guard will cause small pieces of scale/deposits to dissolve/break loose into the water. Check the pump lines and water distribution holes at the top of the filter pads to be sure that there is adequate water flow to accommodate these small pieces during the initial water circulation.

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Remove Cooler Guard from Plastic bag. Keep knit blue fabric enclosure intact. Place Cooler Guard in the water of the basin / sump and away from the circulation pump suction (see *drawing below*).

Replace Cooler Guard at the specified life span interval to insure proper hygiene and unit efficiency.

