

Scale Stop FAQs

1. What is Scale Stop?
2. Why should I use Scale Stop?
3. Where is it used?
4. What are the ingredients?
5. Is Scale Stop EPA registered? For what?
6. Is it rated hazardous?
7. What is the correct usage procedure?
8. How often does the strip need to be changed?
9. Can I take the strip out of the evap cooler water after a week or so and then put it back in for the rest of the 30 days?
10. What size strip do I need to use?
11. Does it need to be attached with hangars? Are the hangars in the photos supplied?
12. Should we test the ppm of the water hardness? How will Scale Stop affect this?
13. Can it be used in vaporizing or atomizing humidifiers, misting systems or drinking water?
14. How fast should it remove the scale from my pads?
15. Should I bleed or drain my system?
16. Why is Scale Stop better than other scale removers?
17. Are there any concerns with storing it?
18. What is the shelf life of the product?
19. Why isn't mine working?

1. What is Scale Stop?

Scale Stop is a controlled-release mineral scale remover and inhibitor for evaporative coolers. It will remove scale that has hardened on older pads, and prevent new scale from forming. It is the only scale inhibitor available that will remove the scale without harming the pads.

2. Why should I use Scale Stop?

When the flutes of evaporative cooler pads get clogged with scale, air flow is restricted. This means the evaporative cooler system will be less efficient at cooling down your houses.

Field trials have shown that where evaporative cooler systems are LESS efficient, mortality rates can increase by as much as 3% and weight gain LOSS can be as much as 6%.

Scale can be so bad that the pads become like cement, restricting airflow to such a degree that the pads need to be replaced. This is very costly. By virtue of keeping the pads scale-free, Scale Stop can extend their usable life span.

3. Where is it used?

In evaporative cooler systems with recirculating water.

4. What are the ingredients?

A proprietary formulation of cleaning agents, dispersants and descalers.

5. Is Scale Stop EPA registered?

No, EPA registration is not required for Scale Stop.

6. Is it rated hazardous?

No, it is not rated hazardous for health or shipping. See MSDS.

7. What is the correct usage procedure?

Evaporative Coolers: Put the Scale Stop strip in the drain basin or sump.

Make sure the water is turned on and flowing over the pads.

Turn off any bleed (the product will bleed out with the water onto the ground if you don't)

Fix any drips and leaks (the product will wash out with the water the leaks or drips out)

Replace every 30 days until visible scale is under control.

Use as needed if scale starts to appear again.

In areas where there is very hard water (high mineral content), Scale Stop may need to be used continually throughout the cooling season.

8. How often does the strip need to be changed?

The strip must be changed every 30 days as long as there is a scale problem. Even though at the end of the 30 days the strip will look exactly the same as when you put it in the water, there will be no more chemicals in it.

9. Can I take the strip out of the evap cooler water after a week or so and then put it back in for the rest of the 30 days?

There is no reason to remove the strip from the water and put it back in, even within the 30 days. The chemicals do not evaporate with the water, so as long as the water is not drained, the scale inhibitor chemicals will still be in the system water when the system is turned back on.

10. What size strip do I need to use?

Up to 85 linear ft (5-6ft tall, 6 inches deep):

one SS4000 per drain

above 80-85 linear ft:

one SS4000 for EACH 80 linear ft

500-1000 gallon tanks or larger:

two-four SS4000 (testing required to determine best sizing for results)

NOTE: Due to the wide variations of conditions (hardness water, number of hours system is turned on, amount of airflow, condition of pads, humidity) there may be instances where a larger size is needed to resolve the scale problem. At times a field trial is warranted at a specific farm e.g. put one strip in the basin on one side of the house, and two strips on the other side.

11. Do the strips need to be attached with hangars? Are the hangars in the photos supplied?

In the smaller drain basins, hangars are not needed as the strips will float below the surface or sink to a level where someone can reach into the water and pull it out to replace it. However, there are chemicals and dirt in that water, so if the maintenance person does not want to put his hand into it, the strip should be hung in some manner. We do not sell hangars as we found that producers preferred to make them out of things like wire or tie wraps.

In underground or large sumps, some kind of hanging chord needs to be attached to the strip. The strip needs to rest just below the water surface, ensuring there is not enough length in the hanging chord to allow the strip to be sucked into the pumps.

12. Should we test the ppm of the water hardness? How will Scale Stop affect this?

Scale Stop does NOT lower the hardness of the water. The minerals will stay in the water - basically in suspension. Scale Stop makes it so the minerals will not stick to the pads. This is what we are trying to accomplish - minerals NOT sticking to the pads so the flutes stay open allowing good airflow, which will also extend the usable lifespan of those pads.

As you can see from this, testing of the mineral content of the water is not an accurate measure of whether or not Scale Stop is working. We are only concerned that the scale is not sticking to the pads.

In a field study conducted by a certified, state approved engineer in Arizona, with very tight evap cooler systems (ones professionally maintained with little or no leaks), it was found that mineral hardness above the level of 300 milligrams per liter (ppm) caused scaling. When our product was used in the system, it extended the water hardness tolerated to 50,000 ppm before scale formed. When this degree of mineral concentration occurs, the water becomes cloudy and even muddy.

Scale Stop has no stoichiometric relationship with parts per million of scale. (Def of stoichiometric: a quantitative relationship between constituents)

What this means is that in standard chemistry, one element combines with another to form an end result, and these elements always combine in exact ratios. For example, one atom of sodium always combines with one atom of chloride to form sodium chloride or salt. You always have one atom of sodium, and always have one atom of chloride, to get salt and there are never any exceptions. This is called a “quantitative” reaction because it revolves around exact quantities.

There are some chemical things that do not behave in this manner. Scale Stop is one of them. Just a small amount of Scale Stop is required to handle large amounts of scale. In essence, the amount of scale that Scale Stop will handle is way beyond any type of ratio.

13. Can it be used in vaporizing or atomizing humidifiers, misting systems or drinking water?

No, the cleaners and descalers in Scale Stop should not be inhaled or consumed, any more than you would want to inhale any chemical. Vaporizing or atomizing humidifiers would put chemicals in the air that could be inhaled. This will also occur with misting systems and evaporative cooler systems that depend on water sprayed onto the pads rather than recirculating water.

14. How fast should it remove the scale on my pads?

Depending on the type and amount of scale on the pads, you can expect to start seeing results within 2 weeks to 3 months. In nearly 15 years of field samples, Scale Stop has proven to remove scale on 90% of the systems within 90 days. Scale Stop works slowly and gently so that it does not harm your pads.

15. Should I bleed or drain my system?

Do not bleed your system. If you bleed the system, the chemicals will wash onto the ground with the water bled off and there will be insufficient treatment to work for you.

If you drain your system, the chemicals will wash out with the water drained. If the water becomes cloudy or muddy, the mineral saturation in the water is too great and it should be drained. The grower should also follow the manufacturer's recommendations on draining the system to clean it. Any time the system is

drained, a new Scale Stop strip must be placed in the basin because the scale inhibitor/remover chemicals will have been drained out with the water.

16. Why is Scale Stop better than other scale removers?

Scale Stop has a proven record of success for over ten years in all kinds of coolers. It will not harm your pads. The only other product on the market that effectively removes scale is acid, but acid will destroy your pads. Strong pressure washing and scrubbing will also hurt your pads.

17. Are there any concerns with storing it?

Do not store below 25 degrees or above 100 degree F for extended periods of time. Store away from moisture.

18. What is the shelf life of the product?

Indefinite if it is not gotten wet.

19. Why isn't mine working?

Check the following and correct as needed:

1. Is the size of the strip adequate for the usage requirements – sometimes the size needs to be larger due to environmental conditions such as unusually high temperatures and cooler usage, extremely high or low humidity, ventilation velocity, condition of pads, etc.
2. Is the system turned on so that the water is flowing over the pads?
3. Have drips and leaks in the system been fixed?
4. Is the bleed turned off so water is NOT being bled?
5. Has the water been drained and a new pad not been put in the sump?
6. Has the strip been replaced after 30 days when there is still visible scale?