Nu-Calgon Product Bulletin

- Prevents scale in cooling towers and evaporative condensers
- Freeze proof to -10°F
- Excellent in extremely hard and high alkalinity water

Water Treatment Products

No. 340 Liquid Scale Inhibitor



Stop scale formation in cooling water systems with No. 340 Liquid Scale Inhibitor

Description

No. 340 Liquid Scale Inhibitor is an organic product based upon AMP phosphonate. It is formulated for preventing scale in cooling towers and evaporative condensers. It is extremely effective, particularly when the water is extremely hard and high in alkalinity. No. 340 is stable and there is no breakdown up to the boiling point, even in highly alkaline or acid solutions. In addition, it is freeze proofed to -10°F and is most effective and economical at treatment levels of 12–15 parts per million (about 1 gallon per 100,000 gallons of water).

Application

Cooling towers and evaporative condensers can be troubled with scale formation where the water is hard and high in alkalinity. This scale can form on condenser surfaces, piping, valves and tower fill. And when it does, water flow and heat transfer are reduced, head pressures go up, power is wasted and a costly motor burnout can result. Treatment with No. 340 can prevent these problems.

Directions for use

Detailed instructions can be found on the back side of this bulletin. Generally in hard alkaline waters, a feed rate of 1/2 gallon per month is recommended for each 30 tons with a bleed-off rate of 1 gallon per minute. A continuous, accurate feed can be accomplished with either the No. 215 or No. 1075 Drip Feeder on systems up to 150 tons. This capillary action plastic tubing can be adjusted to control the flow rate and is easily maintained. For larger systems No. 340 Liquid Scale Inhibitor can be fed with the CMS Feed Pump, or the more complete CMS-IV Cooling Monitor System.

Testing

No. 340 Liquid Scale Inhibitor should be maintained at 12-15 ppm in the recirculating water. The K1583 or No. 89A Test Kit (4798-2) provide the necessary testing procedure.

Packaging

1 gallon bottle	4340-08
5 gallon pail	4340-05
55 gallon drum	4340-01



Directions for use

- 1. Install the proper number of bottles of No. 340 Liquid Scale Inhibitor. Use proper jug holder bracketed to install bottles: Use the C-284-1 holder with 1 gallon bottles and the C-284-5 holder for 5 gallon pails.
- 2. Select and install the proper Drip Feeders. Insert Drip Feeder's probe 1/2 inch above bottom of bottle. Adjust the feeder head as indicated in the chart.
- 3. Use the syringe supplied with the Drip Feeder to start the treatment feeding. Rinse and store syringe for future use.
- 4. Set the bleed-off rate.
- 5. With monthly maintenance, the following should be checked:
 - a) Make sure bleed-off is operating at desired rate.
 - b) Make sure Drip Feeders are working properly.
 - c) Flush out accumulated dirt and foreign matter.



and insert probe 1/2 inch above

bottom of bottle.



Use syringe to charge Drip Feeder.



Arrange Drip Feeder so that lower end is about 1 inch below surface of sump water.

The distance that the weighted end of the capillary tubing is allowed to hang below the middle of the treatment bottle determines the feed rate. This distance is referred to as feeder head, (H), and should always be measured from the middle of the treatment bottle to the end of the capillary tubing.

After the bottle of treatment has been hung at the proper height, the coil of tubing should be placed around the

neck of the bottle. To establish the proper feeder head, as specified in the chart, "H" may be increased by unwinding the required amount of tubing from the coil. "H" may be reduced by coiling excess amount of tubing around the bottle neck.

Never cut the capillary tubing to shorten it; this will destroy the Feeder's calibration and result in too fast a feed rate. Do not allow treatment to drip on bare metal surfaces.

Size System	Number of bottles of No. 340 Liquid Scale Inhibitor*	Feeders and Required Head (inches)*	Number of months Required to empty bottles*	Bleed-off rate (gallons per minute)*
Up to 15 ton	1	1 No. 215 at 23	4	1/2
20 to 30 ton	1	1 No. 215 at 43	2	1
40 to 60 ton	1	1 No. 1075 at 21	1	2
70 to 90 ton	3	3 No. 215 at 43	2	3
100 to 120 ton	2	2 No. 1075 at 21	1	4
130 to 150 ton	5	5 No. 215 at 43	2	5

No. 340 Liquid Scale Inhibitor has been authorized by the U.S.D.A. for use in federally inspected meat and poultry establishments. * These recommendations are based upon severely scale-forming water. Contact Nu-Calgon for specific recommendations.

Read and understand the product's label and Safety Data Sheet ("SDS") for precautionary and first aid information.

The SDS is available on the Nu-Calgon website at www.nucalgon.com.



