# THE ORIGINAL NICKEL-SAFE ICE MACHINE CLEANER.

- Rapid scale remover
- Highly concentrated
- For use in food areas
- OEM Approved
- Formulated for use in all makes and models of ice makers including those with nickel and tin plated evaporaters
- Functional in cubers, flakers, drum and tube machines
- NSF Registered

## Description

Nickel-Safe Ice Machine Cleaner is a specially formulated citric/phosphoric product for removing scale deposits from ice makers having nickel-plated or tin-plated evaporators. In fact, it was the industry's first nickel-safe product, introduced in collaboration with Manitowoc. Usage rate should be in accordance with the manufacturers instructions or 5 fluid ounces with one gallon of system water. As the water is frozen into ice during an ice maker's cycle, the naturally occurring dissolved minerals in the water, some of which can combine to form lime scale, remain behind in the unfrozen recirculating ice water simply because water tries to freeze in its pure state. As the cycle continues and more water is made into ice, the minerals over concentrate and eventually precipitate as a lime scale deposit. As the scale begins to form, it creates a physical obstruction that results in: plugged distribution holes, restricted water flow and eventually the ice maker will hang-up or jam. Ice harvest is reduced and eventually the machine will shut down, requiring service. Once the machine is scaled up, it must be cleaned, requiring the use of an acid so that the scale can be dissolved. The acid must be effective in order to dissolve the scale but it must also be food and equipment-safe.

## **Packaging**

Packaging Size	Part Number
55-gallon drum	4287-01
16 oz bottle	4287-34
1-gallon bottle	4287-08
3.78-liter bottle (Canada)	4841-08
473 ml bottle (Canada)	4841-AB

#### Ice Machine Maintenance

## Nickel-Safe Ice Machine Cleaner



### **Directions for Use**

- 1. Turn off refrigeration, shut off water supply and remove ice from bin.
- 2. Remove water trough, water curtain(s), water distribution tube(s) and other parts that may be scaled with deposits.
- 3. Mix 3 oz. Nickel-Safe Ice Machine Cleaner per gallon of warm water in plastic container and place components in solution. Soak the components until they are free of deposits; for stubborn or thick deposits use a soft brush to help the dissolving action.
- 4. Use above solution to clean storage bin, top, bottom and side extrusions and other components where deposits have collected, then rinse cleaned areas with fresh water.
- 5. Replace cleaned components and turn on water.
- 6. To clean evaporator as well as the remaining recirculating water system, add Nickel-Safe to the water in ice maker according to the manufacturer's instructions. If none are available, use 5 fl. oz. of Nickel-Safe per gallon of water in the machine.
- 7. Allow cleaning solution to circulate for up to 10 minutes; it may be necessary to recirculate the solution for longer than 10 minutes to remove heavier and thicker scale deposits. Be sure all distribution and weep holes are clear. Drain cleaning solution and flush with fresh water for a minimum of 30 seconds. After flushing, plug the drain.
- 8. Thoroughly rinse bin with clean water after all components are cleaned.
- 9. Return machine to service; discard first batch of ice.

