



## **Frequently Asked Questions for Deicers**

- ***Will my floating de-icer ever sink?***  
The H-418/P-418 Floating De-icer is 10% buoyant, enough to keep them afloat. If they sink it's most likely due to added weight on the unit or cord, cast housing, etc. This can occur with lime build up.
- ***I just bought my unit. Why doesn't it turn on when I plug it in?***  
Due to the warm ambient temperature in the retail store, the thermostat has not been in cold temperature long enough to re-set the thermostat to the "on" position. (On at 35F, Off at 45F).
- ***When does the unit turn on and off?***  
All of our tank deicers are thermostatically controlled. The unit will turn on when the water temperature around the heating element is at 35° F and will normally turn off when the water temperature in the specific application is at 45° F (at -10° F outside temperature.) If the air temperature is greater than -10° F, then the water temperature may be a little warmer than 45° F before shutting off.
- ***How do I clean the element?***  
You can use white vinegar and water, Lime-Away or CLR to clean the element. We recommend periodic cleaning during the winter months for maximum performance and efficiency.
- ***What is the white powdery stuff around the element?***  
It is a calcium buildup that needs to be cleaned so the unit performs at manufacture's specifications. This sometimes occurs in areas like the Northeast that has "hard" water or other impurities in the water. Allowing the calcium buildup or other impurities to cover the entire heating element without cleaning it off may cause the heating element to burn out due to not being able to disperse heat.
- ***Why does using an extension cord hinder the performance of my unit?***  
Connecting the unit to an extension cord over a long distance will result in fewer volts and less power. For example, if the voltage drops from 120 VAC to 105VAC while the amps remain the same, the wattage (power) will automatically drop. (Ex. 105VAC x 8.5A = 892.5 watts compared to 120VAC x 8.5A = 1020 watts.) If an extension cord is used, it should be a heavy gauge 3 conductor, designed for outdoor use only, and as short as possible.
- ***Why is my de-icer not thawing the application?***  
Numerous factors may be involved in making your unit not work efficiently. These include the placement of de-icer (wind factor), outside ambient temperature far below zero (sub-zero conditions), high wind chill factor,

volume of water, wrong de-icer (wattage) purchased for the particular application, and the use of a long extension cords (reduces wattage). Completing the "Air Test" will eliminate your concern.

- ***Why should I ground my stock tank or pond?***  
We recommend grounding your tank or pond for the "ultimate" safety application when using any de-icer. You can purchase a grounding kit at your local hardware or easily make one yourself {parts needed: one 8' foot metal ground rod, two (2) metal clamps and a spool of "uninsulated" copper wire}. Drive the 8' long metal rod nearly all the way into the ground next to the tank or pond. Next, clamp the uninsulated copper wire to the side of a metal tank or drape the copper wire into the bottom of a plastic tank. Finally, connect the other end of the uninsulated copper wire to the metal post.
- ***What should I do if my metal cord protector, cage or metal cap is rusting?*** Our metal parts are dipped into a protective pre-coating material to help reduce the possibility of corrosion and/or rust. Nevertheless, rust may occur in areas like the Northeast where the impurities in the water can break down the protective coating. Roughing up the corrosion and spray painting the metal parts with rustoleum paint should stop further damage.
- ***Why is my cast aluminum unit getting the water so warm?***  
The cast aluminum units, like all of our units, have a thermostat which is set to turn on when the water temperature approaches freezing (35° F). The unit is set to turn off when the de-icer reaches its "internal temperature", which at -10° F will make the water temperature in the correct application be 42° - 47° F. If the air temperature is significantly above our testing model (-10°F) then the water temperature may be slightly warmer than our above target temperature (55°F - 62°F). This is normal in *all* de-icers, but rest assured at 0°F to -10°F your de-icer will be operating properly. Completing our easy "Air Test" will eliminate the concern that the thermostat is not turning off and is heating up the water.
- ***What is an "Air Test" and how do I perform it?***  
An "Air Test" determines whether the unit is heating properly and the thermostat is turning on and off. To conduct the test, put the unplugged de-icer into the freezer for 1 hour in order to "trick" the thermostat into turning on. Remove the de-icer from the freezer and quickly plug the de-icer into a known working outlet. The unit will begin to heat up then shut off within seconds for Copper Heating Element units and within two (2) to three (3) minutes for Cast Aluminum Heating Element units. After heating up to the off position of the thermostat, you should hear a slight ***click***. That sound is the thermostat shutting the de-icer off. The unit works fine!
- ***Will the unit shut off automatically if out of water?***  
No - there is not a de-icer on the market with a moisture sensor to turn the unit off when out of water. The copper heating element units will operate for only a few seconds when out of water before turning off and the cast aluminum heating element units for two (2) to three (3) minutes. But rest assured they are totally safe and will not harm the unit or your application. (Note: Caution should be exercised when removing models H-4810 and H-4815 from the water as these do not have guards around the heating

element. We recommend always unplugging any unit before taking them out of the water.)

- **What does "Safe in Plastic" mean?**  
This means that the manufacturer has tested the unit in plastic, structural foam, and pond liners in the worst conditions to assure the unit will not harm the application. All tests are conducted in accordance with Underwriters Laboratories testing specifications.
- **What does an endorsement from Underwriters Laboratories (UL) mean?** The unit has passed very stringent testing procedures by UL ensuring the unit is ultimately safe for consumer use. UL is a non-profit organization dedicated to consumer safety around the world.
- **How do I calculate the volume of water in my pond?**  
Measure length, width, and depth then follow this formula:  $L \times W \times D = \text{Cubic Feet} \times 7.47 = \text{volume in gallons}$ .
- **How many amps does my unit use when running?**  
Watts divided by volts = amps. Example: 1500watt de-icer / 120VAC = 12.5amps
- **Which de-icer should I use?**  
The type of de-icer used (floater, submergible, drain plug) is based upon preference. However, depending upon the gallon requirements in your application and the expected air temperatures, we recommend different wattage requirements. See our table under ["Specifications"](#) on our webpage.
- **DPH-15 – How do I install the de-icer?**  
First, remove the entire drain plug assembly from the Rubbermaid Stock Tank by unscrewing the 2" black nut on the outside of the stock tank. The drain plug assembly will include the black flange housing with the 1.5" drain plug, two (2) washers, and 2" black nut. Remove the Rubbermaid drain plug assemble from the stock tank. Next, insert our DPH-15 Drain Plug De-icer with one (1) orange washer on the threaded flange from the inside of the tank through the 2" assemble hole. Finally, insert the last orange washer onto the threaded flange from the outside of the tank then carefully tighten our 2" threaded black nut onto the threaded flange. Do not over tighten!
- **How does the ThermoCube work?**  
The Model TC-3 (On at 35F, off at 45F) is the most common ThermoCube sold because it is designed for winter use. The ThermoCubes operate by reading the ambient temperature then turning the Cube on and off according to their specific pre-set temperatures. It is not reading water temperature. Hence, the use of a ThermoCube will help save in electricity and wear-n-tear on your devices plugged into the Cube.
- **Why would I need to purchase a ThermoCube with my de-icer?**  
The ThermoCube, Model TC-3 will help save you electricity when the de-icer is going to be used in applications containing more than 250 gallon. The de-icer's internal thermostat is set to turn the unit on when the water is slightly above freezing then continue to operate until the water temperature in the

whole application has heated up to approximately 45F. In larger applications (above 250 gallons) the thermostat will probably never turn the unit off, for again, the unit is trying to heat the entire amount of water up to 45F. **Why use a ThermoCube** – the Cube will turn the device plugged into the Cube on and off according to the pre-set temperature reading the "air temperature" not water temperature. So when the day warms up to 45F the Cube will turn off the de-icer – *a big savings!*