

# **POLAR ICE TRAY**

Square Bamboo Series
User Manual

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# The Characteristics of Polar Ice What makes Polar Ice Unique?

- Easy to Use: Just add water, and place in the freezer to enjoy crystal clear ice.
- Convenient: Unique patented design allows for easy retrieval of ice.
- Versatile: Using the various attachments allows you to produce ice in many shapes and sizes.

## The Concept of Polar Ice

Mimicking the natural ice formation patterns of lakes and rivers, Polar ice begins freezing from the surface layer, while the water below remains unfrozen. The Polar Ice Icebox has an insulated bottom, so that only the surface of the water is exposed to the cold. By allowing the water to freeze from top to bottom, layer by layer, air and impure substances are compressed to the bottom. They then form a layer of "white" or opaque ice, which can easily be removed.

#### **Precautions**



- When using for the first time, please cleanse with detergent and water before use.
- Please cleanse with soft cloth or sponge, do not scrub with rough objects such as bristled brushes to avoid scratching, which may make ice more difficult to remove.
- Keep box away from heat sources as it is made out of plastic.
- Fill with chilled or room temperature water, please do not fill with hot water.
- Non-microwavable, do not place in ovens.
- This product is designed exclusively for producing ice; please do not use it for other purposes.
- The transparency of the ice, and the time it takes to freeze will vary depending on the water quality or the freezer it is placed in.

- Handle ice sensibly to avoid frostbite.
- Falls from high places or heavy impact will damage and crack the casing.
- If the ice is hard to remove, flush bottom of box with water or leave in room temperature for 1-3 minutes. Then slide ice out gently, if removed with brute force, ice may crack.

## Composition

Shaped

Compartment







Clear Ice

Compartment



White Ice

Compartment



Heat Isolated

Base



#### **How to Make Polar Ice**



- Pour cool water into the "White Ice" compartment, filling it close to its brim.
- The quality of ice produced will vary depending on the water used.
- Tap water will still produce clear ice, but we suggest inhabitants of areas with undrinkable tap water to use boiled or mineral water instead.

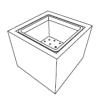


- Place the clear ice compartment upon the White Ice compartment, and slowly begin pressing down. The water in the white Ice compartment will seep into the clear ice layer through small holes.
  - Press down on clear ice compartment until it will go no further.
  - Continue pouring water into the compartment until desired level.



Fixate ice compartments snugly in base.

The water will be level with the sides of the base.

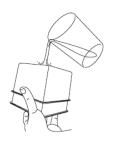


- Upon completion of assembly, place components in freezer.
- It will take 8-12 hours for the ice to freeze sufficiently.
- During the freezing process, please refrain from excessively opening the freezer door or jostling the icebox.

#### **How to Extract Ice**



When the water has frozen sufficiently, remove the ice components from the base.



If separation is difficult, please drizzle the base of the white ice compartment with water, or set aside for 1-3 minutes until it is possible to dislodge the ice.



Prying upon the sides will dislodge the white ice compartment.



Continue prying on the sides to dislodge the white ice mass from the compartment.

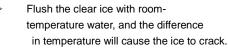
The ice will be very stiff so if prying does not dislodge the ice mass, run it under water, which will help dislodge the "white ice" mass.

Avoid direct and prolonged contact with the ice to prevent frostbite.



The clear ice in the upper compartment can be used directly in your beverages.





Use the back of a spoon or another hard object to strike the ice.

 Light strikes will break ice into chunks of various sizes.



Un-uniform ice chunks are perfect for use with beverages, especially whisky.

#### **Conditions of Solidification**



Completely Frozen: be cautious of extremely low temperatures

- Sufficient freeze time of 8-12 hours.
- White ice layer will be raised prominently; center of ice mass will feel completely solid.

Incompletely Frozen: be cautious of sharp edges

- Insufficiently cold temperature, or less than 8 hours in the freezer.
- White ice" layer will be raised, but the center of the ice may remain liquid.
- Upon opening the compartments, you may find the bottom of the ice hollow, with sharp edges on the edges of the holes. Handle with caution.



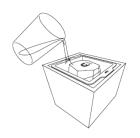
## How to Make Shaped Ice



The shaped compartment can mould the clear ice to improve its versatility and enjoyment.



- Fill the white ice layer with water.
- Place the clear ice compartment on top.
- Slowly press the sculpture down, the water will seep through the holes.
- When the sculpture compartment layer reaches the bottom, press down so slide flaps click firmly into place. Excess water will exit through vents.
- Place compartments in base and put into freezer.



- If you have difficulty removing the sculpture ice, avoid flushing with water as this will cause the ice sculpture to crack.
- Allow the ice to sit in room temperature for 1-3 minutes for easy removal.

#### Q&A

#### Difficulty with ice removal

The Polar Ice Tray set compartments are designed to fit airtight, to prevent the escape or spillage of air or water. Sometimes, due to the jostling of compartments after assembly, water may leak into other compartments. When this water freezes, ice removal may become difficult.

- Solutions: Flush with water or set aside: Flush the outside of the ice box with water, or leave in room temperature for a few minutes. It will become easier to extract the ice once it has begun to defrost.
  - ■While putting the compartments together, be careful as to not let water seep into the other compartments.

#### Bubbles in the ice

**Under Rapid Freezing Conditions:** Air dissolved in the water the water will be moved towards the surface of the water due to the shape ice crystals. These bubbles are miniscule, with poor floating abilities, so some will adhere to the surface of the ice crystals. If the freezing time is quicker, these bubbles will be trapped inside the ice before they are able to exit on the surface. these bubbles will be trapped inside the ice before they are able

to exit on the surface. The clusters of bubbles will refract and bend light, causing the ice to appear white or opaque.

**Under Slower Freezing Conditions:** Before all the bubbles in the ice are trapped, the air bubbles may group together to form larger bubbles. Larger bubbles will be able to rise to the surface at a faster speed, therefore escaping the ice before they are trapped. While doing this, the bubbles may leave behind small exit trails in the ice. If you find large bubbles inside your ice, it is most likely due to jostling or movement of the ice tray before solidification. Please avoid opening the freezer or moving the ice tray during the ice formation period.

**Lengthy freeze time**: It will generally take 8-12 for the ice cubes to freeze to their ideal form. The time will vary depending on the variations in freezers. In comparison to ordinary ice cubes, Polar Ice cubes take longer to solidify due to the following reasons:

- The ice cube is approximately 250cc four times the ordinary 150cc trays.
- ■Insulted base prevents ice from freezing from the lower layers.

If the ice has not solidified after 12 hours, this is most likely due to insufficiently low temperatures in your freezer, or too many items in the freezer.



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