

## ENGEL'S TIPS FOR MAXIMIZING ICE RETENTION

The best way to measure the effectiveness of an ICEBOX is how long it keeps ice. Most Engel Hard ICEBOXES retain ice for up to 10 days. This is due not only to the rotomolded construction, but to the fact that there is a full 50mm of insulation in the lid, the sides and the bottom, as well as the all silicone gaskets that create a nearly airtight seal. Whereas other companies use low-cost, therefore more brittle, rubber for their gaskets, Engel uses the best quality silicone available. Additionally, Engel's latch system is like no other, using easy open and close compression latches in rubber or stainless steel, creating an air tight seal – with less loss of cold – than other latches.

Use the following information to get the most out of your Engel hard ICEBOX.



If you start with a warm icebox, you are going to waste a bunch of ice cooling the icebox itself. Buy an extra bag of ice that you can use to just prepare your icebox for use.

#### MIND YOUR ICE TO CONTENTS RATIO

We recommend using twice as much ice as you have contents in your icebox. That means that two-thirds of your icebox should be ice while one-third of your icebox should be your drinks and food. And remember to fill your icebox up with ice for maximum retention.

#### **ICE TEMPERATURES CAN MAKE A DIFFERENCE**

Warmer ice (i.e. ice that is at '0' degrees Celsius or above) is usually wet or dripping so you are already starting with a deficit. Ice that is colder than freezing is ideal because it is dry and will last longer.

#### SHOULD I USE BLOCK ICE OR CUBED ICE?

Both cubes and blocks have their merits. Cubed ice chills an icebox and its contents more quickly than block ice, but block ice melts more slowly. The real pros use a combination of both: cubes to cool things quickly and block to keep everything cool.



### AIR IS GREAT FOR BREATHING BUT NOT FOR INSIDE YOUR COOLER

Always pack your icebox as full as possible without overfilling it. This makes it more efficient and makes your ice last longer. A good trick to use is to fill the empty spaces with crumpled newspaper. This will eliminate the air pockets without adding additional weight to your icebox.

Note: Over-filling your icebox and forcing down the lid could compromise your seal, letting in air which will adversely affect ice retention.





# ENGEL'S TIPS FOR MAXIMIZING ICE RETENTION

#### REFRAIN FROM THE DRAIN

Each time you use your icebox, resist the urge to drain the water from your melted ice until you are finished using your icebox. That ice cold water actually helps to insulate the remaining ice. Keep your exposed food and especially your meat out of that water.

### HAVE FUN IN THE SUN BUT KEEP YOUR COOLER OUT OF IT

You can prolong the life of your ice by keeping your icebox in the shade; in some cases by twice as long. If you aren't in a

position to keep your icebox in the shade, put a towel or a tarp over it to keep it out of direct sunlight.



#### **KEEP A LID ON IT**

The more you open your icebox, the faster the ice melts. It makes sense, right? An open icebox lets in the warm air causing ice to melt faster.

#### IS DRY ICE MY BEST OPTION?

Engel Rotomolded Hard iceboxes are dry ice compatible. And dry ice can keep the contents of your icebox cold, and even frozen, for a longer time than regular ice.



#### WHAT EXACTLY IS DRY ICE?

Dry ice is the frozen form of carbon dioxide. It is perfect for quickly freezing and keeping items frozen. In fact it's -78 degrees Celsius and gives off more than twice the cooling power per kilograms than regular ice made from water. In addition it's a fraction of the weight of regular ice, so there's more room for your stuff when packing your icebox.

#### IS DRY ICE SAFE TO HANDLE?

It is completely safe, however there are some precautions to keep in mind. Because it is so cold, we

recommend using leather or cloth gloves when handling it. Oven mitts or hand towels will also work just do not use your bare hands. You will want to keep it out of reach of small children to prevent them from getting freezer burn.

Another precaution to keep in mind is ventilation. Because dry ice is frozen carbon dioxide, when it melts, it gives off carbon dioxide gas. This process is called sublimation. Without the proper ventilation, carbon dioxide will displace oxygen which, as you know, is what we breathe. Breathing in carbon dioxide gas could cause shortness of breath and prolonged exposure could make you lose consciousness. However, if you store your cooler in a well ventilated are and make sure there is proper ventilation in your vehicle during transport, you will not have any issues.



# ENGEL'S TIPS FOR WAXIMIZING ICE RETENTION

#### **MAKE IT WORK FOR YOU**

To ensure that everything, including regular ice, is kept frozen for at least 24 to 48 hours, use one block of dry ice per each 35cm interior length of the icebox.

Before packing your icebox, wrap each block of dry ice in several sheets of newspaper.

You can pack your dry ice either on top or the bottom of your icebox. It is convenient to pack it on the bottom, but it will last longer packed on top.

Remember to minimize those air pockets when packing the icebox. You can fill in these air pockets with regular ice, or, if weight is an issue, you can fill them in with crumpled newspapers.

Just like with regular ice, keep your icebox out of the sun to make your dry ice last its longest. If it is not possible to keep your icebox out of the sun, cover it with a blanket, sleeping bag, towel or a tarp.

Dry ice can be used with cubed or block ice.

#### **ICE SUPPLEMENTS FROM ENGEL**

To extend the life or your regular ice, use Engel

icebox Packs & Freezer Packs . These come in multiple sizes and temperatures and can also be used in place of any other ice altogether. This is especially helpful if you want to make sure that the contents of your cooler stay as dry as possible.

