



What is Dry Ice and How to Use It

What is dry ice?

Dry ice is frozen carbon dioxide (CO₂), the same gas that gives soft drinks fizz. It is neither toxic nor flammable, becoming harmless CO₂ gas as it “melts.”

It takes 450 cubic feet of CO₂ gas to make one cubic foot of dry ice, which has a temperature of -109° Fahrenheit and 10 times the cooling power of regular ice. Because its temperature is so low, it is recommended for use in home freezers only, not refrigerators or refrigerator-freezers that do not have a separate outside door for the freezer.

How do you use dry ice?

- **Leave the dry ice in the bag.** It is safer to handle this way and will last longer. Wrapping newspaper around the bag of dry ice will make it last even longer.
- **Do not put dry ice in a tightly-sealed container.** It releases a large volume of CO₂ as it “melts” and the gas has to have someplace to go. When dry ice is used in a freezer, the gas escapes around the rubber gasket on the freezer door.
- **In a chest-type freezer,** put a piece of cardboard on top of the food and set the dry ice on top of the cardboard.
- **Do not let dry ice touch any metal surface in a freezer.** It can damage sensors or cooling coils. Place a block of wood or cardboard on the shelf in an upright freezer and put the dry ice on the wood.
- **Do not use dry ice in a refrigerator-freezer that does not have a separate outside door for the freezer.** Dry ice is so cold it may freeze foods you don’t want frozen. An open container of regular ice will work well. Put the ice on the top shelf of your refrigerator for best results. In any case, open the freezer or refrigerator door as infrequently as possible.
- **Once electricity service is restored,** any remaining dry ice should be disposed of in a safe manner. Place it in a trash can with a loose cover or bury it where it will not harm flowers or shrubbery. Don’t put it where children or animals can get at it.

How much dry ice do you need?

Your needs will vary depending on the size of your freezer and how full it is. A fully loaded freezer requires less dry ice than one that is only partially loaded.

Remember, food in a fully loaded freezer usually stays frozen for 36 to 48 hours if the door is kept shut, even without dry ice.

Our experience shows that 10 pounds of dry ice will keep food safe in a 12- to 15-cubic foot freezer for 24 hours.

CAUTION!

- **Never let dry ice come in contact with bare skin,** and keep it away from children and pets.
- **Wear insulated gloves when handling dry ice,** even when it is wrapped or in a bag; it is so cold **IT CAN CAUSE SERIOUS BURNS.**
- Also, CO₂ gas is heavier than air; **it can displace the oxygen you need to breathe** if it accumulates in depressions or unventilated areas.