

## FAQ

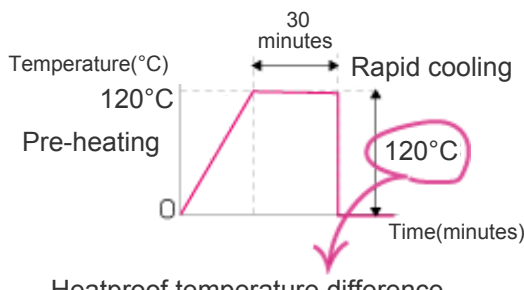
### Glass

Q. What do you mean by “difference” in “heatproof temperature difference”

A. HARIO’s glass for microwave can resist a temperature difference of more than 120°C. “More than 120°C” doesn’t mean that it can stand 120°C. It means the glass can resist without breaking a rapid change in temperature of within 120°C, either from quick heating or cooling.

For example, if water is microwaved to a boil using our heatproof glass container and put it into water immediately after boiling, the glass container does not break because the difference in temperature is within 120°C. However, if you hold a heated heatproof glass container with a wet cloth or expose it to water drops, a part of the container may be exposed to a temperature difference of over 120°C. Please use our heatproof glass product carefully bearing that in mind.

Heat a heatproof glass container in an oven at 120°C for 30 minutes and put it into ice water of 0°C.



Q. My heatproof glass has broken. Why is that?

A. Heatproof glass is strong against heat. But it is not tempered/toughened glass. It is as strong as usual glass against impact. Please handle it very carefully. For more details, please refer to “[Glass Types](#)”.

Q. What causes bumping?

A. When water does not boil even when its temperature exceeds the boiling point (100°C), that is called “overheating.” When overheated water is exposed to impact (shaking, mixing, etc.), it suddenly boils up and hot water of nearly 100°C spurts out. This is called bumping.

[Attention!]

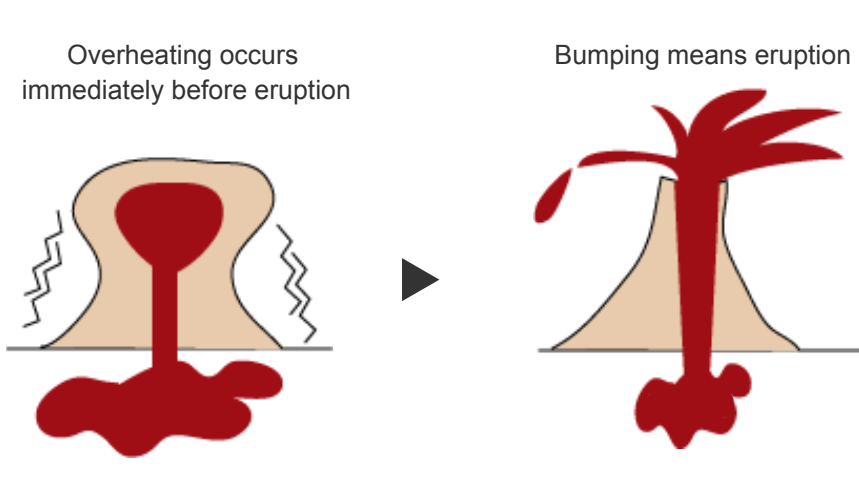
Bumping is very dangerous because hot water spurts out. When water takes a long time to boil, stop heating immediately. Leave it without touching it to avoid impact. Move the glass container when the hot water cools down.

\*Bumping could occur with a stainless steel pot that has relatively slow thermal conduction (heat-retaining pot). It can also occur not only by heating directly over a flame, but also by microwaving.

[Suggestion]

Bumping can be prevented by avoiding overheating and helping water to bubble. For example, heat water with a wooden chopstick or a piece of wood in it, or heat it while mixing it with a chopstick or spoon.

If we compare bumping to a volcanic eruption....



Q. Can I clean with a dishwasher?

A. Yes, you can for HARIO’s heatproof glass products. But for attached parts and components, please follow their directions for use. Also observe your dishwasher instructions carefully.

Q. Something is sparkling in the glass container. What is it? Is it harmless?

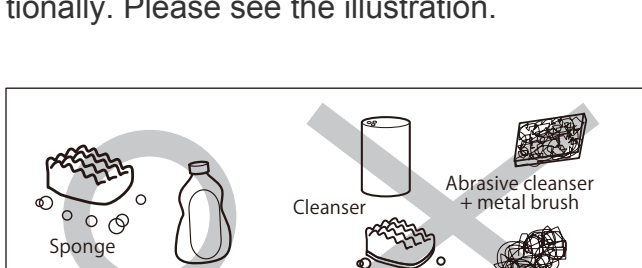
A. They are called flakes. They can be seen when you look into a glass vacuum bottle.

Chemical compounds such as magnesium and calcium present in water react near the glass surface to form and accumulate ion crystals. They sparkle. They are minerals and harmless.

To remove them, put vinegar or a citric acid detergent (add ten parts of water to the liquid) in a glass container, leave it for more than one hour, and wash it with a sponge, etc. to avoid scratching the glass.

Q. How can I take care of the glass?

A. When you wash it, please use a neutral detergent and a soft sponge. Please avoid using a sponge that has an abrasive material or contains abrasive particles. You may damage the glass unintentionally. Please see the illustration.



For stubborn stains, please use bleach for household use by diluting it. Please faithfully follow the directions for use of the bleach.