

What you will need:

- Microwave
- Microwavable plate
- Bar of unwrapped ivory soap

Ivory Soap Expands

Overview and Objective

Ivory soap has a unique factor about it, compared to other soap bars it has a much higher water content. The air bubbles in the soap contain water molecules and water is also caught up in the matrix of the soap itself.

Because of the high volume of air whipped into a bar of ivory soap, when the bar is heated in the microwave, it expands rapidly into a huge, fluffy cloud in just seconds! The expanding effect is caused when the water is heated. The water vaporizes and the heat causes the trapped air to expand.

Process:

1. Get your microwavable plate and bar of ivory soap.
2. Unwrap the soap and place it on the plate and into the microwave.
3. Watch the soap expand as it is heated in the microwave until it has completely expanded. Around 20-40 seconds.
4. Wait until the soap completely cools, and then you can play with it and see how it feels.

What have you found?

The soap is estimated to expand to about 6x it's original size.

What happened with your bar of soap?

Have you ever microwaved something else that also expanded?



Share with us your experiment or ideas!

www.facebook.com/abc11scienceclub

www.abc11.com/scienceclub