Flash-O-Mints

Look for a flash when you chew Wint-O-Green mints!

Activity Guide

Try This!

NOTE: This activity must be done in a very dark room. Wait for your eyes to adjust to the dark before you begin.

1. Face a friend, and have him or her watch while you chew a mint—with your mouth open! Can your friend see a small, bluish flash?
2. Now have your friend chew a mint while you watch.
3. If you have trouble seeing the flash, try crushing the candies using pliers. (The saliva in your mouth can keep the mint from flashing.)

What's Going On?

The flash you see is an example of a phenomenon called *triboluminescence.*

When sugar crystals are broken, a tiny electrical field is created. One side of the break has a negative charge and the other has a positive charge. The extra electrons on the negatively charged side jump to the positively charged side, exciting the molecules in the air and creating a flash of invisible ultraviolet light. This will happen when any sugar crystal breaks, but normally you can't see it.

Wint-O-Green mints contain wintergreen oil (methyl salicylate), which is naturally fluorescent. The wintergreen oil converts the flash of invisible ultraviolet light into blue light that you can see.

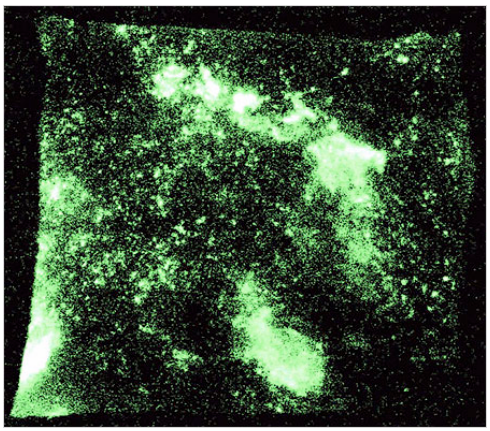

Photo Credit: N. C. Eddingsaas and K. S. Suslick/ University of Illinois at Urbana-Champaign

Learning Objectives

- When sugar crystals break, a tiny electrical field is created.
- The green flash you see when you chew Wint-O-Green mints is a phenomenon called *triboluminescence.*

Materials

- Life Savers® Wint-O-Green mints
- Pliers (optional)

Credits

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