



WHAT YOU WILL NEED:

- Baking soda
- White vinegar
- Stovetop or burner
- Spoon
- Heat-safe container or saucepan
- Two small glass bowls
- One large glass bowl
- Ice
- Water
- Safety goggles
- Safety gloves
- Adult supervision

HOW TO MAKE HOT ICE

Overview and objective:

Students will discover how to **make hot or sodium** acetate through crystallization.

Crystallization is also a chemical solid–liquid separation technique, in which mass transfer of a solute from the liquid solution to a pure solid crystalline phase occurs.

Source: Wikipedia.org/wiki/Crystallization

Procedure:

- 1. Create homemade sodium acetate by mixing six tablespoons of baking soda with two liters of white vinegar. A chemical reaction will occur.
- 2. Once fizzy reaction stops, boil mixture on medium-high heat until about 90% of liquid is evaporated and a crusty film begins to form on top.
- 3. As crystals form when liquid evaporates, scrape them off sides of pan with a spoon and add to a small glass bowl. Set aside for later.
- 4. Remove completed solution from heat and pour into small, glass dish. Add a tablespoon of vinegar and stir.
- 5. Fill larger glass bowl with ice and water add smaller glass filled with solution into ice water until chilled.
- 6. Once solution is chilled, take a pinch of crystallized sodium acetate and add to solution to create hot ice.







Visit us on <u>www.Facebook.com/abc11scienceclub</u> and share the video or picture of your HOT ICE!

www.abc11.com/scienceclub









