

Name _____

Acids at Work: How Acids Are Used in Industry

Short Answer Key

1. Acids in food preservation extend shelf life by inhibiting the growth of spoilage microorganisms. For example, acetic acid (vinegar) preserves pickles by creating an acidic environment that prevents the growth of harmful bacteria.
2. In drug manufacturing, acids are used to synthesize active pharmaceutical ingredients, control the pH of formulations, and ensure the stability of drugs during production.
3. Acids play a crucial role in the dyeing process in the textile industry by helping fix dyes to the fabric. They create a chemical bond between the dye and the textile, ensuring colorfastness.
4. One example of a household cleaner containing acids is a lime scale remover. It contains acids that dissolve mineral deposits and lime scale, making bathroom fixtures and tiles shine.
5. Using acids in waste treatment helps neutralize hazardous waste materials, making them less dangerous to the environment and human health. This prevents the release of harmful substances into the surroundings.

