ACIDS, BASES, INDICATORS & NEUTRALIZERS

About Acids

Aspirin is an acid called acetylsalicylic acid. Your stomach is full of another acid, called hydrochloric acid (the formula for it is H+Cl). But what is an acid? What does the word acid mean?

When most people hear the word acid they think of a funny looking science glass (called a beaker) filled with choking smoke and poisonous vapors rising out of it. And inside that beaker is a liquid that will burn like fire if it touches you and will eat through your skin and anything else it spills on.

We're very sorry to say that the truth is not nearly as exciting. A lot of different compounds are acids. Some, like sulfuric acid, really will give you terrible burns if you touch them. But many acids are much tamer. Vinegar contains acetic acid. Orange juice contains citric acid. Speaking of orange juice, vitamin C is also an acid, ascorbic acid to be exact.

Properties of Acids

1. sour taste
   WARNING! taste or touch are dangerous ways to test for an acid or base
2. react with metals
3. every acid contains hydrogen

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Retrieved & adapted in part from:
http://www.chemheritage.org/EducationalServices/pharm/asp/acid00.htm; and
http://www.fotosearch.com/BDX290/bxp50438
4. almost all acids are formed from non-metals
5. many are poisonous and corrosive to (eat away) the skin

**About Bases**

A lot of times when we talk about acids, we talk about acids and bases. We know what an acid is, but what is a base? A base is just the opposite of an acid. Sodium hydroxide is a base used in making soap and to unclog sink drains since it dissolves oil and grease. Other bases, like aluminum hydroxide, are used to make deodorants, or laxatives and antacids for when you aren’t feeling well.

**Properties of Bases**

1. bases usually taste bitter
   
   **WARNING!** taste or touch are dangerous ways to test for an acid or base
2. feel slippery
3. strong bases are poisonous & corrosive to (eat away) the skin
4. bases break down fats and oils

**About Indicators**

Is it an acid or a base? Litmus paper can tell you if something is an acid or base, & pH paper can tell you how strong the acid or base is.

**About Neutralizers**

Bases are used to counteract acids that are spilled on skin or clothing. Baking soda is used to neutralize acids. And antacids (like Rolaids) contain bases used to reduce excess stomach acid.