

Acids, bases and salts – anecdotes

Education in Chemistry

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Acid

The name acid is derived from the Latin word *acere* meaning to be sour as the earliest acids were identified through taste. Vinegar and fruit juices contain organic acids, whereas acids like hydrochloric acid and sulfuric acid are known as mineral acids as they are not obtained from living things. The sour taste found in lemon juice is due to citric acid, vinegar is sour because it contains ethanoic acid and sour milk contains lactic acid.

Base

The name base comes from the Greek word *basis* meaning pedestal. Early chemists found that strongly heating plant ashes produced a substance able to neutralise acids. This remaining part was the base (pedestal) upon which the rest of the compound had been built. An alkali is a soluble base.

Salt

A salt is an ionic compound that can be formed by the neutralisation reaction of an acid and a base. The name salt is derived from the Latin *sal*, referring to sodium chloride – a chemical of such importance it is believed that Roman soldiers were given an allowance for the purchase of salt their *salarium* (salary)

Making soap, saponification is a chemical reaction between an acid and a base to form a salt. When oil or fat (which contain fatty acids) are mixed with a base (usually sodium hydroxide) soap forms (which is a salt).

Bases feel slippery or soapy because they react with molecules in your skin called fatty acids (caution strong bases damage skin).