

A candle is made of fuel (commonly wax or paraffin) and an embedded wick providing light since the Ancient times.

The wick is a piece of cotton string mordanted in boric acid, salmiac and phosphates. It is crucial, otherwise the pure cotton would burn very fast and with a lot of fume. After having been carbonized the wick leans from the way of the flame and burns away. The cellulose content of the wick reacts with the salts used in mordanting and it dissolves without leaving ashes behind.

Candles have been used by humanity for two thousands years. Throughout centuries they got belonged to the household essentials. The first widespread wax was the beeswax used by Romans to make candles.

At a very early stage (in the Ancient era) the excellent burning features of the tallow and the fat became well-known so they were also used in various places. After Christ candles made of tallow appeared because wax for everyday use was too expensive. Poorer people used tannage (by-product of beef-fat) instead of wax but these candles exhausted unpleasant odour and soot.

In the seventeenth century arsenic was added to tallow resulting positive aesthetic effects on the product but arsenic (being strongly poisonous) caused many troubles in everyday life.

At the beginning of the nineteenth century stearins and glycerides in vegetable oils and animal fat, which influence solidity, were discovered. In 1825 M. E. Chevreul and J. L. Gay-Lussac patented the candles made of stearins. From that time on cotton string as wick and paraffin as fuel were used so people could produce better quality but cheaper ones at the same time.

Nowadays candles are usually made of paraffin and stearin. Stearin increases the melting point and lengthens the burning time.

*(Source: Wikipedia)*