



Basic Knowledge and Facts about Bleach

Is Bleach natural chemical or synthetic chemical?

Bleach - sodium hypochlorite is the solution based on **natural chemical element** Chlorine (Cl). Almost all chlorine in the Earth's crust occurs as chloride in various ionic compounds. The most common compound of **Chlorine is salt** (sodium chloride). Chloride is a component of the salt that is deposited in the earth dissolved in the oceans. Nearly 2% of seawater is chloride ions. Over 2000 naturally occurring organic chlorine compounds are known. The chemicals currently used for bleaching is the result of 18th century scientists. The chlorine solution dissolved in the water were first used as a purification agents and disinfectants in 1820s. In US chlorine has been used to disinfect and purify water from 1918. The extensive range of micro-organisms killed by bleach make it **an extremely effective natural disinfectant**.

Chlorine is used extensively in **organic chemistry** and in the manufacture of consumer products. Bleaches are used as household chemicals to whiten cloth, remove mildew, kill weeds, increase the longevity of flowers and as disinfectants, primary in the kitchen and bathrooms.

The Environmental Protection Agency has **registered bleach** for use in the households, nursing homes, healthcare and daycare facilities, swimming pools.

The smell of bleach is indicative of a disinfected environment. That should be no concern for any adverse health effects, because the level of gas concentration is usually low in the basic use. In most cases, people's pre-existing beliefs or unawareness, about the source of an odor may create anxiety. The basic information and real facts can reduce concerns and complaints.

Education is knowledge. Knowledge is a power.

The noticeable **chlorine odor** is the chemical reaction that occurs when bleach begins to break down bacterial proteins. The more frequently surfaces are disinfected with bleach, the fewer proteins will be on the surface for the next time. Basically, **the more frequent** the surfaces are disinfected, **the lower the odor** should be.

The smell of bleach should be recognizable in people's mind as smell of **clean and disinfected environment**, although a proper ventilation is advised.

The key words:

- Bleach **starts as Salt and Water** and **ends as Salt and Water**.
- **The smell** of Bleach is a reassuring cue that facility is **Clean and Germs Free**.

Summary prepared by:

Margarita Smith - Founder of Bio Maids