

# Chemical reaction paper

[Science](#), [Chemistry](#)



Bleach Action al affiliation Bleach refers to a substance that decolorizes or rather whitens other substances. Bleach is sometimes used for disinfection purposes. Chemical reactions take place that results in the decolorization and disinfection. The most common type of bleach used in the world today is made of chlorine compounds. The bleaching effect is achieved through oxidation or reduction process. The most commonly used bleach agents made of chlorine compounds decolorizes by oxidation. Oxidation refers to the process whereby the compound removes oxygen from one compound or supplies electrons to the substance. The chlorine compounds formed such as hypochlorite is in unstable and decomposes gaining oxygen to form a stable compound.

Proper understanding of how bleach works require scrutiny of the changes that take place at the molecular level. The oxidation process by the bleach breaks the chemical bonds of the coloured part of the molecules known as the chromophore. The breaking of the bond changes the molecule in such a way that it has no color or does not reflect any color in the normal spectrum that can be seen with naked eyes. On the other hand, reducing bleach acts by converting the double bond of the chromophore into a single bond and thus changes the optical structure of the compound making it colorless (Innes, 2009).

During the process, some bonds are broken. The chemical bond in the chromophore is broken which converts it to a compound that has no color or cannot reflect color in the normal spectrum. Another type of bond broken is the covalent bond in the bleaching agent as the release or gaining of oxygen atom occurs.

## References

Innes, G. L., & Business Communications Co. (2009). Oxidizing and bleaching agents. Norwalk, CT: Business Communications Co.