

# About effect of salt on rusting

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



Citric acid reacts rapidly with iron, but is not itself the rusting of iron.

The water in the lemon juice helps iron rust, but in the presence of air. The same happens when you open bottle of Coca-Cola, including citric acid, phosphoric acid, carbonic acid and other things in the fall for the taste. Citric acid has an advantage over some other acids, because it is less corrosive, not as dangerous to the environment, while remaining efficient, cheap (but not as cheap as the old battery acid). The chemistry is relatively simple, rust (iron oxide) is Solubilised by the acid (ammonium ion is also acidic) and citrate ion coordinates to the iron-forming soluble iron citrate. Citric acid has an advantage over some other acids, because it is less corrosive, not as dangerous to the environment, while remaining efficient, cheap (but not as cheap as the old battery acid). The chemistry is relatively simple, rust (iron oxide) is Solubilised by the acid (ammonium ion is also acidic) and citrate ion coordinates to the iron-forming soluble iron citrate. A fast, easy and safe to remove rust from your old tools (or anything else for that matter) is to dip rusty parts in a solution of citric acid.

Citric acid can be bought at the pharmacy. Officially it is used as an obstruction of the pig!. The involvement of water accounts for the fact that rusting occurs much more rapidly in moist conditions as compared to a dry environment such as a desert. Many other factors affect the rate of corrosion. For example the presence of salt greatly enhances the rusting of metals. This is due to the fact that the dissolved salt increases the conductivity of the aqueous solution formed at the surface of the metal and enhances the rate of electrochemical corrosion. This is one reason why iron

or steel tend to corrode much more quickly when exposed to salt (such as that used to melt snow or ice on roads) or moist salty air near the ocean.

[pic] salt will speed up rusting. The more salt you have the faster more severe rusting you'll get. [pic] It will speed up the rusting as it allows the metal to oxidise faster [pic] the salt will speed up the rate of rusting since it will dissolve in water to become a weak acidic solution hence will make the metal to rust more quickly [pic] The more proximity to sea the more chance of rusting since the air coming from the sea contains salt. So, it is safer to avoid use of iron frames on windows etc. at the time of construction or repair of your house, shopping complex if the places are in proximity to the sea.