

# Borax Class





# Borax

- Borax, or otherwise known as sodium tetraborate, sodium borate, or disodium tetraborate, is a natural mineral that is used as a commercial and household chemical. Powdered borax consists of colorless soft crystals that easily dissolve in water and is a white color. However, the IUPAC (International Union of Pure and Applied Chemistry) name for it is sodium tetraborate decahydrate. It is a salt and an important compound of boron, that is mined directly from the ground. The chemical formula of borax is  $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$ . Borax has been around for centuries, first being discovered in dried lake beds in Tibet, but first came into common use in the 19<sup>th</sup> century when the Pacific Coast Borax Company was created. Did you know that in the 1900s borax was used by miners in the Philippines during the gold extraction process as a substitute for toxic mercury?
- It naturally occurs in seasonal lakes from the evaporate deposits that are produced by repeated evaporation. It can be produced synthetically from other boron compounds, but when it occurs naturally, it does so in a process called recrystallization. The most commercial places borax is found are in Turkey and California.
- This product can be used in many different products and industries. It can be used for laundry detergent, household cleaning products, dishwasher detergents, medicinal purposes, and for some bath and body products. Did you ever play with putty or slime? Well, borax can actually be used to make these fun childhood toys.

# Borax Uses in Industries

## Laundry Detergents

- When combined with baking soda, soap, and water, you can make your own laundry detergent. This homemade detergent, provides a nice cleaning boost.
- Borax also works to soften harder water which in turn makes the detergent more effective. When regular detergent is used in hard water, it can combine with the calcium and magnesium granules at the bottom of the machine which makes it not able to properly clean the clothes. When the borax is used to soften the water, it helps to keep the detergent dissolved to clean the clothes better.
- It also helps to keep stains from getting back onto the clothes.
- Making your own detergent is a great to avoid chemicals that are in store bought detergents such as phenols and sulfates and is also more eco friendly.

## Dishwasher Detergents

- One big benefit of making your own dishwasher detergent is the fact that it is a lot cheaper than buying the detergent in a store, and it is much more eco friendly because store bought detergents usually contain a lot of additives and chemicals.
- Borax helps to increase the power of a cycle in the dishwasher and keeps the dishwasher itself cleaner as well.
- It gives the detergent a boost and helps to make the dishes shinier and cleaner with less soap films and dirty spots.





# Uses in Industries

## Bath and Body Products

- Many different products and industries have uses for borax. It can be used for many bath and body products such as bath salts, bath bombs, creams, shampoos, gels, and lotions.
- When used in creams or lotions, borax can be used as an emulsifier, meaning it helps the water and oil to stop from separating. These creams and lotions can help to remove grime and cosmetics from the skin.
- Borax in bath salts helps to soften the water and helps to suspend soap particles. This has many skin benefits by helping to make the skin healthier, cleaner, and softer.
- When combined with citric acid in bath bombs, borax helps to produce a fizzing action.
- There are also hair care benefits to borax as well. When used in shampoo, it helps to remove sweat from the hair, stop itching and flaking of the scalp, and inhibits bacteria.

# Uses in Industries Cont.

## Household Cleaning Products

- Borax can be used to make an all-purpose cleaner for kitchens. It is great for cleaning grease, stains, and all kinds of grime out of sinks, off of counters, pots and pans, cleaning out garbage disposals, and all kitchen appliances. It is safe to use on any kitchen surface.
- Borax powder is used to cleaned bathrooms as an all purpose cleaner as well. It helps to brighten tile and grout and removes any rings that are around bathtubs. It also works as an odor eliminator.
- When used for steam cleaning carpets, it removes odor from the carpet, brightens and refreshes worn carpets, and helps to remove any caked in dust or dirt that a normal vacuum would miss. It works as a natural cleanser and is a great way to avoid using unhealthy chemicals on your carpet.
- It can also be used to create an odor eliminating spray that can be used anywhere throughout your home.

## Medicinal Purposes

- There are many medicinal purposes to using borax. It has anti-inflammatory properties and can be used as a detoxifying agent. It is also a fungicide, and helps to remove many bacteria and parasites from the body.
- It can help to stabilize calcium, magnesium, and copper levels and stimulate the production of many hormones.





# Uses in Industries Cont.

- Borax can help to treat and eliminate many different infections such as bladder infections and urinary tract infections. It has also been used to treat osteoporosis, cancer, high blood pressure, osteoarthritis, obesity, swollen gums, and arterial disease.
- Because of its anti-inflammatory properties, it can treat swollen gums, arthritis, gout, and many inflammatory diseases.
- Mentality can be enhanced using borax as well. It helps to improve hand-eye coordination, attention, perception, and short and long term memory.
- It is great for helping wounds to heal faster and can be used to protect from and remove fluorides from the body.
- Borax can also be used as an aphrodisiac for both women and men. It helps to stimulate estrogen and stimulate testosterone.
- It also can be used for its anti-fungal properties in a foot soak.

## Other Uses

- It can be used as treatment for thrush in horses hooves and a curing agent in snake skins.
- Borax is a component of ceramics, glass, and pottery, and is also an ingredient in enamel glazes.
- It can also give fires a green tint and can be used to treat and prevent wood rot.

# Other Uses

- In cars, engine block leaks and radiators can be stopped with borax.
- Sprinkled borax can kill fleas and deter mice around the house and also deodorizes cat litter.
- Mixed with lemon juice borax can also remove rust stains. It is also used to preserve flowers.
- Violin strings can also be saved using borax!
- Nature's Garden sell [borax](#) for external use only. We do not sell it as a food item. The information above talks about how great borax is for many industries, however we only sell it for external use. We provide this data for educational purposes only. Nothing in this article is to be construed as medical advice. Please consult your doctor before using this product or any of this information for treatment purposes.
- Ready for some awesome fun with borax? Try one of our amazing recipes like our [Scented Putty Recipe](#)! And make sure to check out the rest of our [free classes and recipes](#) as well!

