

Hydrocure S.A.

APPLICATION AND USAGE

Sodium Sulphite

Pulp & Paper



In the paper making process the wood chips are cooked in a digester with chemicals for delignification. Sodium sulphite is added to the wood chips for the purpose of softening and better delignification helping in production of good quality paper with high strength.

Other uses

- Used in desalination plant as an antichlor agent.
- As an oxygen scavenger in industrial boilers and oil & gas exploration.
- Photographic industry to protect developer solution from oxidation and (as hypo clear solution) to wash fixer (sodium thiosulphite) from film and photo-paper emulsions.
- In the textile industry as a bleaching and dechlorinating agent.
- For leather treatment to control the pungent smelling hydrogen sulphide gas.
- Used in the purification of TNT for military use.

- In the manufacturing of various chemicals & intermediates.
- Other application includes floth flotation of ores, oil recovery food preservation and making dyes.

Catalysed Sodium Sulphite

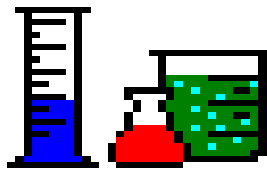
Drilling Muds

While drilling for natural fuels, corrosion can occur due to the presence of oxygen in the working environment. This corrosion caused leaking of natural minerals into the surrounding thereby contaminating the environment. By use of Catalysed Sodium Sulphite directly with the drilling heads & within the tubing that runs down chances of corrosion reduces significantly.

Boilers



Oxygen present in the water is the major source of corrosion & hence to improve the quality of water, removal of oxygen from water is extremely critical. Cobalt based Sodium Sulphite or Catalysed Sodium Sulphite an advance form of Sodium Sulphite removes this extra oxygen form water at a pace which is many times faster than what would have been achieved by the use of normal Sodium Sulphite.



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Potassium Metabisulphite

Wine Industry



With about every wine kit comes Potassium Metabisulphite, which is also used as an additive in wineries. It slows down the aging, i.e. oxidation of wine by removing free oxygen suspended in the wine. Potassium Metabisulphite is often called a stabilizer because it serves to prevent spoilage and further fermentation by removing oxygen. However, this serves to also preserve the flavor and color of a wine.

Sodium Metabisulphite

Textile



Dyeing in textile industries is one of the most important processes. The presence of chlorine during dyeing affects the overall quality of the final fabric. Sodium metabisulphite helps in removal of chlorine from the fabric before it goes through the dyeing process thus contributing in improving the fabric quality.

Water Treatment

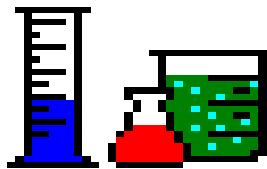


Natural water is the most widely used raw material in many manufacturing processes in industries. This water after being chemically processed tends to have many impurities, which are important to be removed before releasing back into the environment. With the additional of sodium metabisulphite to the water bath chlorine and other heavy metals are removed thus making it safer to be released back into the natural sources.

Preservatives



New food trends require processed food to retain a long shelf life through preservation. Food tends to get spoiled due to the presence of water and oxygen, which allow micro-organisms to grow. When sodium metabisulphite is added to the food, it creates a layer of SO_2 over the food which restricts spoilage and micro-organisms growth, hence preserving the food over a longer period of time.



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Shrimp / Seafood



Seafood is an exquisite delicacy which is required to be fresh before being served to the customers. Ports are mostly located outside the metropolitan cities due to which there is always a time lag of 4-5 days before raw seafood is supplied to restaurants. This causes a loss of taste & color in seafood. By adding sodium metabisulphite, the seafood remains fresh and there is a minimum change in color pigments (anti melanosis) of seafood which delights seafood lovers.

Mining



Mineral ores when mined tend to have many forms of metals present within them. In order to separate these metals, a tertiary chemical such as cyanide is added during mining. Once the metals are removed, the solution bath cannot be released into the environment without being treated. Sodium metabisulphite acts as a depressant and is used for treating this bath to neutralize the effect of cyanide, allowing for the water to be released back to the environment.

Chemical Synthesis



In the manufacturing of certain products, sodium metabisulphite is used as one of the reagents in this chemical reaction / synthesis, either as a catalyst or as a monomer.

Bakery



A good bakery product is soft & also retains the taste of all the good ingredients used during baking. Sodium metabisulphite can be added to the initial dough during preparation as a pastry relaxant to soften the dough mix. It acts as a compound improver & helps to retain the taste after baking.

Leather

Hair follicles are present on raw hide which are required to be removed to produce high quality leather. To remove hair, raw hide is treated with sodium sulfide; however, this process produces a strong gas called hydrogen sulfide. Sodium metabisulphite is added during the process to reduce the formation of hydrogen sulfide.