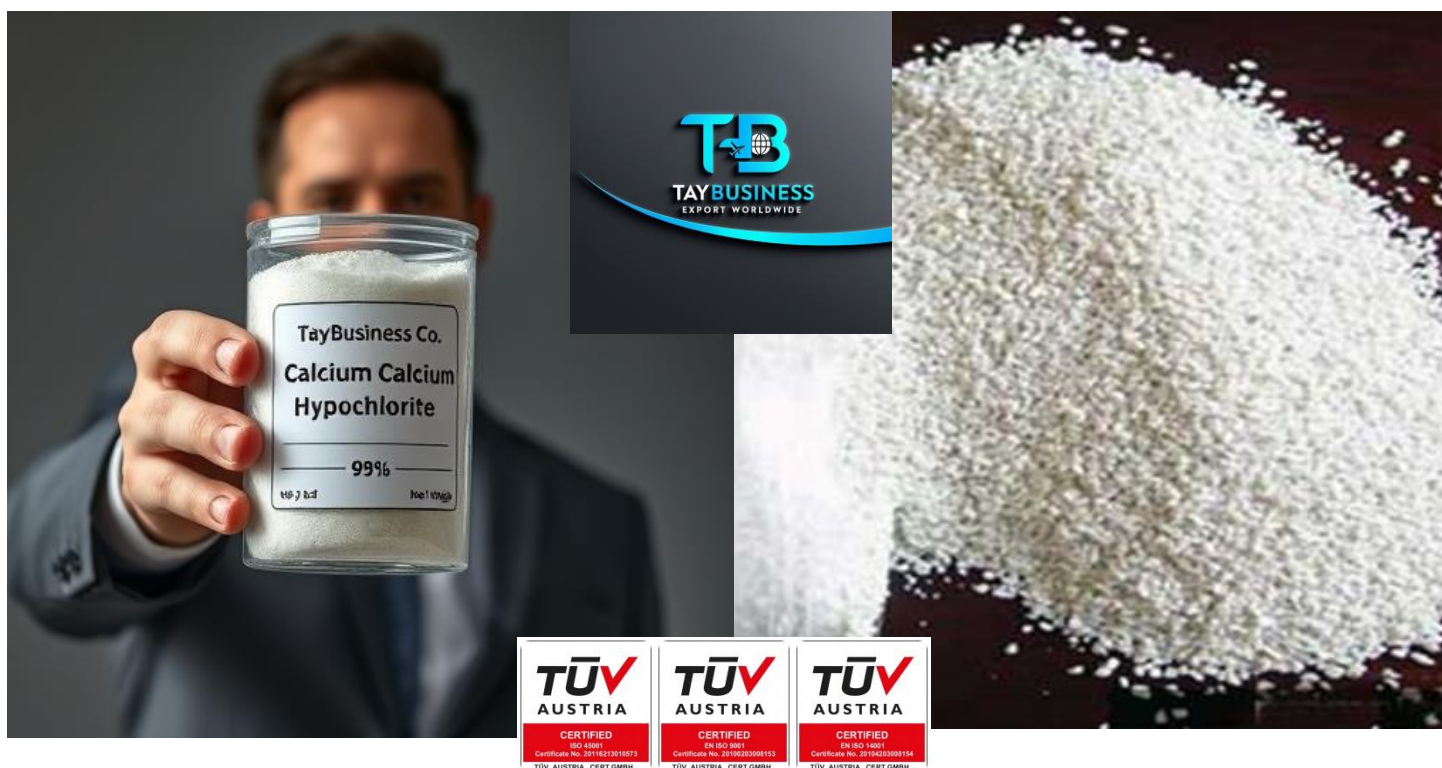




What is per-chlorine?

Powdered chlorine is a chemical compound used as a source of active chlorine for disinfection and cleaning. Contrary to the reference to sodium hypochlorite, powdered chlorine most often refers to calcium hypochlorite, which is a solid and more stable compound than liquid sodium hypochlorite. Calcium hypochlorite, or per-chlorine, is used in drinking water treatment, pool disinfection, and irrigation systems due to its strong ability to release active chlorine. It is also used in the agricultural and horticultural industry to control weeds and prevent the growth of bacteria and fungi in irrigation systems. Due to its powder or granular form, this substance is easier to transport and store and has a longer shelf life than sodium hypochlorite. When dissolved in water, powdered chlorine releases active chlorine, which is effective in killing harmful microorganisms, including bacteria, viruses, and algae.

Structure of calcium hypochlorite ($\text{Ca}(\text{ClO})_2$)

A calcium atom (Ca) in the center of the structure.

Two hypochlorite groups (ClO) are attached to each of the calcium atoms.

Chemically, calcium hypochlorite is known as a representative of hypochlorite and calcium compounds and has their properties.

The advantages of powdered chlorine include its long shelf life and disinfecting power. By adding powdered chlorine to water or other environments, bacteria, viruses, and various microorganisms can be destroyed.

It is important that powdered chlorine is used carefully and in accordance with safety guidelines, as this substance can be dangerous in high quantities.

Per-chlorine, or calcium hypochlorite, is a chemical compound that is used as a chlorine-containing substance to disinfect and sanitize various environments. This compound consists of calcium, chlorine, and oxygen. Calcium hypochlorite is used specifically in the water and wastewater industries, water treatment, and for use in swimming pools and irrigation systems.

When calcium hypochlorite is added to water, it releases oxygen and forms active chlorine, which acts as a disinfectant and anti-microbial agent. This is of great importance in maintaining hygiene and controlling infections in water and aquatic environments.

Calcium hypochlorite should be used carefully and according to the manufacturer's safety instructions because it can be a hazardous substance in the above cases.

Calcium hypochlorite uses

Swimming pool water treatment: Per-chlorine is used as a disinfectant in swimming pool and spa water. It is added to water to kill bacteria, viruses, and other contaminants and keep the pool water clean and safe.

Drinking water treatment: In some cases, it is used as a purifying agent in drinking water treatment. This substance is added to water to kill microorganisms and make the water drinkable.

Industrial Applications: It is used in various industries to disinfect and purify water and various materials. It can be used in wastewater treatment, industrial water treatment, and even in water treatment in the food and pharmaceutical industries.

Other Applications:

- For bleaching wood pulp, silk, fabrics and fibers
- Disinfectant of toxic chemical and radioactive substances
- Disinfectant in aquaculture, livestock, etc.

Some other uses of perchlorate include:

- In organic chemistry, it is very useful due to its oxidizing agent behavior.
- Uses of calcium hypochlorite are for bleaching hemp, cotton, fibers, disinfecting surfaces, pulp and starch, and as a disinfectant for water treatment.
- It is also used in some bleach solutions.
- It is used as a solid fire extinguisher.
- Due to the presence of reactive chlorine, it is used to treat sewage and drinking water.
- It is used in the preparation of chloroform during haloform reactions.
- It is used in hard water to prevent clogging of filters or pipes.
- It is used in disinfection and deodorization in the beverage, food processing and sugar industries.
- It helps in giving more color and brightness in the carpet industry.

- It is also used (known as bleaching powder) for linen and cotton bleaching.

Per-chlorine is used as a mosquito controller by killing mosquito larvae in drains, gutters, ponds, etc.

Uses of Per-chlorine for Vegetables

Many people use it to disinfect fruits and vegetables after purchasing per-chlorine. It kills bacteria and does not allow pathogens present in fruits and vegetables to enter the human body.

The Harms of Per-chlorine in Pools

Adding this substance to pools filled with soft water is beneficial, but if you want to add this substance to pools with hard water, you should also pay attention to the increased calcium level. Increased calcium hardness causes scaling of the pool walls and causes the water to become cloudy.



Certificates

Worldwide delivery and shipping



Per-chlorine HS-Code: [282810](#)

Caustic Soda HS-Code: [281511](#)

Per-chlorine Compositions

Composition	Unit	INSO 7098 Spec.	ISIRI 3352 Soec.	TayBusiness Chlor Spec.
Av.Chlorine	%w/w	Min 65	Min 65	Min 65
Solubility (as Av.Chlorine)	%w/w	Min 45.5	--	Min 45.5
Insoluble in water	%w/w	Max 6	--	Max 6
Moisture	%w/w	5.5-10	2-8	Max 8
As*	ppm	Max 5	--	Max 5
Cd*	ppm	Max 5	--	Max 2
Cr*	ppm	Max 15	--	Max 5
Hg*	ppm	Max 5	--	Nil
Ni*	ppm	Max 8	--	Max 8
pb*	ppm	Max 15	--	Max 5
Sb*	ppm	Max 15	--	Max 5

Composition	Unit	INSO 7098 Spec.	ISIRI 3352 Soec.	TayBusiness Chlor Spec.
Se*	ppm	Max 20	--	Max 10
Fe	%w/w	--	Max 0.5	Max 0.2
Remain on mesh 425 micron	%w/w	--	Min 75	Min 75
Remain on mesh 2 mm	%w/w	--	Max 20	Max 20
Apperance	--	White granule	White granule	White granule

