



**DID YOU
KNOW**

GET
THE
FACTS
ABOUT
GAS
CHLORINE

**DID
YOU
KNOW?**

GAS CHLORINE is 100% elemental chlorine.

GAS CHLORINE is the safest method of water disinfection.

GAS CHLORINE does not degrade over time.

GAS CHLORINE is the most cost-effective method.

GAS CHLORINE uses reusable cylinders.

GAS CHLORINE SAVES LIVES.

FACT Gas chlorine is the most efficient form of chlorination.

Gas chlorine is 100% elemental chlorine and remains full strength, no matter how long it is in storage. By contrast, granules and compressed tablets of calcium hypochlorite have only 65% of total weight in available chlorine and loses its strength once the container has been opened. Because of its form and storage, sodium hypochlorite also degrades over time and can lose up to 50% of its potency in the first 90 days. Typically 12.5% solution averages approximately 10% by the time it is used, making it the most inefficient of all chlorination forms.

FACT Gas chlorine is the most cost-effective method of chlorination.

Gas chlorine costs less than 1/2 the price of other forms. Because bleach or granules are not 100% chlorine, the cost increases proportionately. It is important to evaluate true costs of all forms of chlorine on the basis of cost per pound of available chlorine.

Gas Chlorine contains **100%** available chlorine per pound.

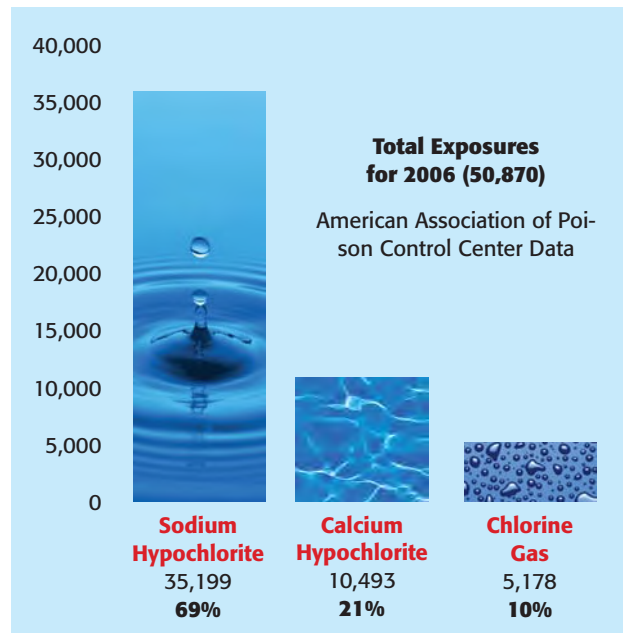
Calcium Hypochlorite contains **65%** available chlorine per pound.

Sodium Hypochlorite contains approximately **12.5%** available chlorine per gallon.

DID YOU KNOW THAT GAS CHLORINE IS THE MOST EFFICIENT,

FACT Gas chlorine is the safest method of chlorination.

Safety regarding chlorine isn't about the chlorine itself, but about the accidental release of gas, and the ability to contain it if that happens. Chlorine gas, by itself, is not explosive. Chlorine gas is delivered in a system designed for gas use. Modern day gas delivery systems are based on a vacuum, instead of pressure, which further ensures safety, since a broken pipe will not exhaust gas in a vacuum-driven system: no gas is released. When the news reports a chlorine "gas" release, many times the exposure is due to off-gassing of hypochlorites. The chlorine gas would not have been released if the hypochlorite had not been involved in a violent, sometimes explosive, chemical reaction, usually due to accidental mixing of chemicals.



Based on chlorine content, it is necessary to feed different amounts of each to achieve the same disinfection level.

1 Pound of Gas Chlorine =

1.5 Pounds of Calcium Hypochlorite

1 Pound of Gas Chlorine =

1.2 Gallons of Sodium Hypochlorite

The result is a monthly cost comparison that shows that gas chlorine is clearly more cost-efficient. In addition, equipment, transportation and operating costs must be factored into cost equations, with the result also showing that gas chlorine will reduce costs.

FACT Gas chlorine is the choice method of chlorination for a wide variety of industries.



A large percentage of industries use products that are dependent upon chlorine. This affects us everyday in the food we eat and the water we drink. From farming to soda bottling, well water to municipal water facilities, chlorine is used to make our water safer. The poultry, dairy and livestock industries rely upon gas chlorinated water for



COST-EFFECTIVE AND SAFEST METHOD OF WATER DISINFECTION ?

FACT Gas chlorine is the most regulated method of chlorination.

Preventing chlorine exposure incidents has long been the goal of gas chlorine manufacturers and users. Extensive training on the safe transfer and use is a top priority. Government safety regulations strictly enforce this process, and those who come in contact with gas chlorine have great respect for its safe handling. The government requires RMPs (Risk Management Plans) for water and wastewater facilities storing certain amounts of gas chlorine. OSHA requires similar PSMPs (Process Safety Management Plans) for the manufacturing sector. These plans enhance safety through planning and prevention. The RMPs required for Chlorine Gas may in themselves make Chlorine Gas the safest choice.

washing, sanitizing and animal drinking water. Meat processing plants depend upon it for both processing and chilling water; using it to spray the equipment and products. Beverage bottling plants use gas chlorine to sanitize their facilities. Fruit and vegetable processing plants use it to wash down all produce. Gas chlorinated water is used in canneries to cool cans after cooking, as well as for facility sanitation.



GET MORE **FACTS** TODAY!

OUR MISSION

To educate operators, industry users and the general public about the benefits, safety and reliability of utilizing 100% pure chlorine gas for water disinfection.

To dispel myths and half-truths about the use of gas chlorine.

To keep decision making at the local level where people know best what works for them.

To keep water safety as the priority over misrepresented fears about gas chlorine.



NOW YOU KNOW!

**GAS
CHLORINE
SAVES
LIVES.**

For more information,
please contact us:



1-888-280-0047

gcec@chlorinegas.org

www.chlorinegas.org