



70% Calcium Hypochlorite

PRODUCTION PLANTS

Engineering at service
of sustainability



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KERN SD

develops on-site calcium hypochlorite production facilities tailored to meet the technical-economic needs of customers

KERN SD plants are fully customizable in terms of production and concentration.

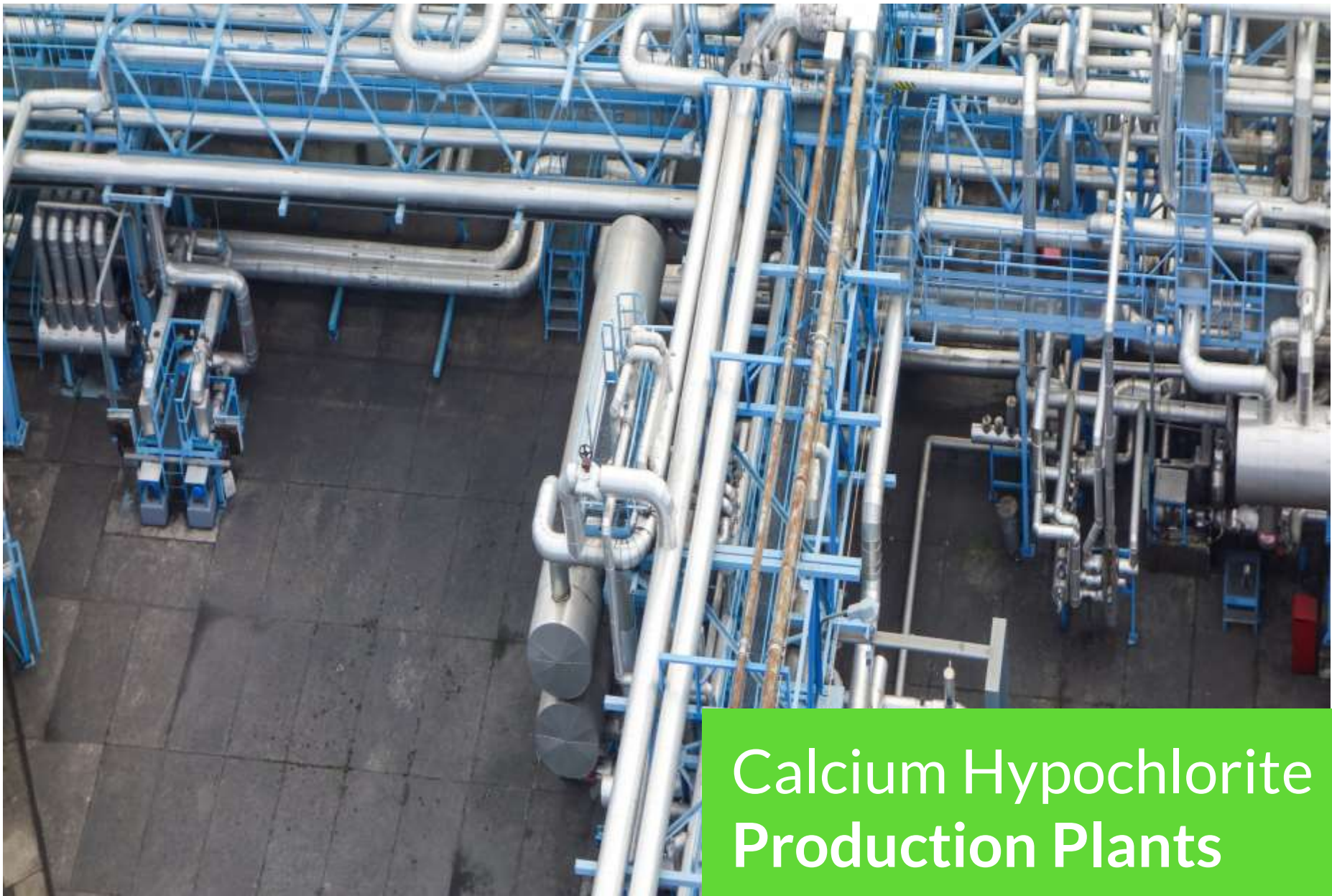
The overall reaction of the process is :



- KERN SD has an innovative technology for the production of Calcium Hypochlorite “in situ” from chlorine gas.
- Plants designed and developed by KERN SD use safe, environmentally friendly and highly competitive technology due to their low investment and low operating costs (high electrical efficiency and degree of automation).
- KERN SD technology complies with the EU Best Available Technologies (BAT) Directives for the production of chlor-alkali (Directive 2010/75/EU).

TECHNICAL SPECIFICATIONS OF THE PRODUCT (Ca (ClO)₂)

Appearance	White
Melting point	100 °C
Boiling point	175 ° C
Density	2,35 g/cm ³
Molar Mass	142,98 gr/mol
Water solubility	21 gr/100 ml at 25°C



Calcium Hypochlorite Production Plants

PLANT FEATURES

Output	Min. 4.000 Tn/year
Flexibility	50-100%
Concentration	70%
Materials	Built with high quality materials
Monitoring	Fully automated and monitored plants

- **ON-SITE PRODUCTION**
- **CONTAINERIZED OR FIXED PLANTS**
- **MODULAR AND SCALABLE**
- **AUTOMATIC CONTROL**
- **SAFE OPERATION**
- **ECONOMIC SAVINGS** (low operating and maintenance costs)
- **HIGH ENERGY EFFICIENCY**
- **SIGNIFICANT REDUCTION** of associated storage, handling and road transport risks
- **HIGH PURITY PRODUCT**
- **NO ENVIRONMENTAL IMPACT**

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According to the World Health Organization (WHO), “chlorine disinfection is the best guarantee of microbiologically safe water”, the best option for water treatment and purification. Sodium hypochlorite is highly effective in combating all types of microbes that may be contained in water, including bacteria, viruses, fungi and yeasts, and the algae and slime that proliferate inside pipes and in tanks.

SOME APPLICATIONS

OF CALCIUM HYPOCHLORITE

- Swimming pool disinfection
- Drinking water treatment and disinfection
- Wastewater treatment
- Disinfection of hospital equipment and food and beverage processing equipment
- Microbiological control in agriculture
- Bleaching (paper, textile)

In general, it is a very effective bactericide for the sanitation of equipment and environments in hospitals and in the dairy, fishing, meat and poultry industries, etc. and a clear alternative to chlorine gas.