

Sodium hypochlorite generator

MINICHLORGEN sodium hypochlorite systems provide an on-demand supply of <1.0 % sodium hypochlorite solution, generated through the electrolysis of diluted brine solution.

The MINICHLORGEN system automatically draws a concentrated brine solution from a salt saturator which is then diluted to the correct strength with softened water for efficient electrolysis. The diluted brine is automatically fed to the electrolytic cell where electric current is passed through the solution, producing sodium hypochlorite. The automatic process cycle is repeated until the product tank is filled.

Conventional sodium hypochlorite loses up to 20 % of the chlorine it contains during storage. The 1 % sodium hypochlorite generated by MINICHLORGEN does not require any additives; its chlorine contents remain stable over months.

Generated in close proximity to the process, the direct storage and dosing of sodium hypochlorite rules out accidental spillage of the sodium hypochlorite and contact with the operating personnel.

Advantages

- Eliminate delivery & handling of hazardous chemicals
- Handle only salt
- Generate on-site for on-demand or residual storage
- No offgassing as with conventional sodium hypochlorite solutions in dosing pumps
- Eliminate injection point scaling associated with commercial sodium and calcium hypochlorites
- Considerable Health & Safety benefits
- One single MINICHLORGEN unit can provide chlorine disinfection for multiple injection points using a common product tank and dosing pumps
- Simple and low maintenance frequency
- Long 5 Year electrolyzer life span

Areas of Application

- Chlorination of potable water supplies
- Food washing / processing treatment
- Dairies / Breweries cleaning in place (CIP)
- Cooling tower biocide treatment
- Secondary disinfection
- Industrial chlorination treatments
- Swimming & Spa pool disinfection
- Animal husbandry



Functions

- MINICHLORGEN models available for 30, 60 and 90 g/h chlorine capacity
- Robust and corrosion resistant housing
- Vivid LED illumination from the electrolytic chamber offers indication of the chlorine generation process and the current process - status
- Easy to operate, multi-lingual control panel & OLED display with status indicators
- Operational parameters displayed and code protected programming
- Alarm event-log with real time recording
- Volumetric flow measurement of water and brine for consistent, high efficient electrolysis
- Safe operation by ambient air monitoring from a hydrogen detector
- Remote transfer of error messages, data logging & RS485 options
- MINICHLORGEN is supplied with hardware for wall mounting, tank level-switch kit and brine suction assembly





Technical data

Description		MINICHLORGEN		
		30	60	90
Chlorine Capacity	PPD	1.5	3.0	4.5
Chlorine concentration*	g/l	6		
Power consumption	kWh	0.15	0.30	0.60
Power supply	Ø	110 - 240V		
Operating pressure	psi	30 - 115		
Nominal water consumption*	gph	1.3	2.6	4
Nominal salt consumption*	PPH	.22	.44	.66
Protection class	IP	54		
Permissible ambient temperature	°F	+41° - +113°F		
Permissible feed water temperature	°F	+8 - +25*** +46° - +78°F		

^{*} standard factory settings

Further specifications upon request

The MINICHLORGEN is a system for the "in situ" production of the biocide active agent "active chlorine produced from sodium chloride via electrolysis".

Biocidal active agent:

Active chlorine produced from sodium chloride via electrolysis

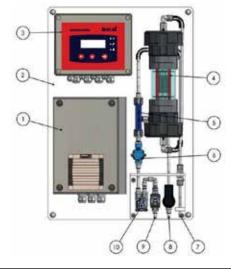
EC no. mix;

CAS no. not applicable

EC no. 231-598-3; CAS no. 7647-15-5;

Precursors: Sodium chloride

Special salt for electrolytic cells DIN EN 16401 and 14805



Description			
1	Power supply for electrolytic cell (rectifier)		
2	Rigid backboard		
3	Control box		
4	Electrolytic cell		
5	Injector for brine		
6	Pressure reducer		
7	Product outlet connection		
8	Solenoid valve for brine control		
9	Connection for softened water		
10	Flow meter for the dilution water		

^{**} in this case, extra venting is required

^{***} in this case, a water cooler is required