



## Advantages of ANOLYTE

- ready solution that can be easily obtained on site in the required amounts using AQUACHLORINE systems
- environmentally and technically safe since ANOLYTE leaves no traces after processing and its active substances completely and spontaneously degrade to low-salt drinking water
- strong bactericidal, disinfecting and sterilizing effect
- general-purpose solution that can be used for disinfection, presterilization cleaning and sterilization of medical devices as well as general treatment of premises, disinfection of equipment, clothes, surgeon's hands etc.
- can be applied by rubbing, sprinkling, soaking or spraying
- affects the entire spectrum of pathogenic microorganisms, including spores
- does not generate resistance in known viruses and bacteria
- provides prolonged decontamination of water mains
- effectively removes biological film in water supply systems
- substantially reduces pipeline corrosion
- allows reducing the amount of added chlorine to a bare minimum
- does not produce any by-products of chlorine or ozone treatment

## Absolute Technological Breakthrough

Mig Tech's engineering team has created the revolutionary AQUACHLORINE electrochemical system consisting of a patented electrochemical element and an original patented hydraulic circuit that allows eliminating many process and design components that are integral to regular electrolysis circuits. This solution results in a much simpler and more reliable design as well as lower equipment costs, making AQUACHLORINE a market leader among electrolysis systems and reducing salt and electric energy consumption to the absolute minimum.

Mig Tech is also introducing cutting-edge automation and control elements that bring AQUACHLORINE to a whole new level – from a system to an entire complex. AQUACHLORINE complexes are ready-to-use automated solutions for many industries and applications where accurate metering of injected oxidants with feedback to the electrolysis system is required.

In addition, Mig Tech specialists will develop customized process solutions for your production facilities meeting your specific usage conditions and parameters.

ANOLYTE is a practical disinfectant solution successfully used in medical applications. Because of non-toxicity of ANOLYTE as compared to previously used disinfectants, utilization of AQUACHLORINE systems for disinfection, pre-sterilization cleaning and sterilization of medical devices as well as treatment of premises, disinfection of equipment, clothes, surgeon's hands etc. Fundamentally changes the working conditions for medical personnel.

Microorganisms do not develop resistance to ANOLYTE regardless of the duration of use. ANOLYTE may be used in the presence of humans without personal protective equipment since it has the minimum toxicity class; it does not leave any traces after drying and does not require subsequent removal; due to metastable composition of its active agents, it degrades to basic substances (salt and water) after disinfection and requires no further disposal; finally, it does not accumulate in the environment.

ANOLYTE is used for disinfection and pre-sterilization cleaning of instruments, appliances and surfaces, treatment of surgeon's hands, decontamination of medical waste to be disposed, and production of washing solutions for treatment of biological contaminations.

ANOLYTE has been widely used at healthcare facilities since 1992 and has proven to be a reliable, effective and inexpensive disinfectant.



## Advantages of AQUACHLORINE Systems

- The systems have dust- and moisture-proof enclosures that protect their electric circuits from accidental contact with water and simplify the enclosure decontamination procedures at healthcare facilities.
- The unique patented reactor design enables longer maintenance intervals; frequency of maintenance can be substantially reduced.
- Full or partial automation of the ANOLYTE synthesis process considerably simplifies the operation, and in some cases completely eliminates the need for continuous performance monitoring.
- Automated systems identify the need for self-maintenance and perform it after notifying the operator.
- AQUACHLORINE systems feature extremely high reliability proven by the quality certificate.



### Operational and Economic Performance of ANOLYTE Production with AQUACHLORINE Systems

Parameter	Measurement unit	AQUACHLORINE 60	AQUACHLORINE 80	AQUACHLORINE 160	AQUACHLORINE 250	AQUACHLORINE 500	AQUACHLORINE 1000	AQUACHLORINE 2000
Average NaCl consumption								
Daily	kg/day	1.8	2.4	4.8	7.5	15.0	30.0	60.0
Annual	kg/year	657.0	876.0	1752.0	2738.0	5,475.0	1,0950.0	21,900.0
Operating mode								
		Flow	Flow	Flow	Flow	Flow	Flow	Flow
Daily duty cycle	hours	24	24	24	24	24	24	24
Average ANOLYTE capacity in chlorine equivalent								
Hourly	kg/h	0.03	0.04	0.08	0.125	0.250	0.50	1.0
Daily	kg/day	0.72	0.96	1.92	3.0	6.0	12.0	24.0
Annual	kg/year	263.0	350.0	700.0	1,095.0	2,190.0	4,380.0	8,760.0
Daily decontaminated water capacity	m3/day	600.0	800.0	1,600.0	2,500.0	5,000.0	10,000.0	20,000.0
Specific technical and economic performance as per datasheet								
Specific NaCl consumption, no more than	kg/kg Cl <sub>2</sub>	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Specific electric energy consumption, no more than	kW-h/kg Cl <sub>2</sub>	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Maximum power consumption	kW							
Rated power consumption	kW/h	0.3	0.4	0.5	0.6	1.2	2.5	5.0
Annual electric energy consumption	kW-h x year	2,628.0	3,504.0	4,380.0	5,256.0	10,512.0	21,900.0	43,800.0
Annual total costs								
Total costs = 0.12 capital costs + operational costs	RUB/year	32,810.0	40,760.0	64,960.0	94,810.0	166,220.0	306,920.0	589,160.0
Specific economic performance								
Net cost of oxidant mix	RUB/kg	125.0	116.5	92.8	86.6	75.9	70.1	67.3
Water treatment cost (g Cl <sub>2</sub> /m <sup>3</sup> )	pyб./kyб. м. m <sup>3</sup> )	0,15	0,14	0,11	0,10	0,09	0,08	0,08
at chlorine consumption of 1.2 g/m <sup>3</sup>	RUB/m <sup>3</sup>	0.15	0.14	0.11	0.10	0.09	0.08	0.08



## MEDICINE

ANOLYTE is a practical disinfectant solution successfully used in medical applications. Because of non-toxicity of ANOLYTE as compared to previously used disinfectants, utilization of AQUACHLORINE systems for disinfection, pre-sterilization cleaning and sterilization of medical devices as well as treatment of premises, disinfection of equipment, clothes, surgeon's hands etc. Fundamentally changes the working conditions for medical personnel.

Microorganisms do not develop resistance to ANOLYTE regardless of the duration of use. ANOLYTE may be used in the presence of humans without personal protective equipment since it has the minimum toxicity class; it does not leave any traces after drying and does not require subsequent removal; due to metastable composition of its active agents, it degrades to basic substances (salt and water) after disinfection and requires no further disposal; finally, it does not accumulate in the environment.

ANOLYTE is used for disinfection and pre-sterilization cleaning of instruments, appliances and surfaces, treatment of surgeon's hands, decontamination of medical waste to be disposed, and production of washing solutions for treatment of biological contaminations. ANOLYTE has been widely used at healthcare facilities since 1992 and has proven to be a reliable, effective and inexpensive disinfectant.

### Disaster Medicine

With AQUACHLORINE systems at their disposal, mobile hospitals gain access to an unlimited supply of disinfecting and sterilizing solutions in emergency conditions. This allows reducing the amount of disinfectants to be transported.

- ✓ Obtaining an environmentally friendly cleaning, disinfecting and sterilizing solutions for washing, disinfection, cleaning and sterilization
- ✓ Disinfection of premises and equipment in the presence of people
- ✓ Disinfection of the hands of the surgeon
- ✓ Decontamination of medical waste
- ✓ The use of emergency disinfection in remote areas away from civilization
- ✓ Cleaning solution for removing protein contaminants
- ✓ Preservation of native DNA structure at the genetic forensic



## EASY TO PUMP-UP THE VOLUMES AND AFORDABLE DISINFECTION TO FIGHT CORONA VIRUS PANDEMIA

**ANOLYTE - cost of production of 1 liter at reactor operation time**

24

hours/day

Water	0,00300	EUR
Electricity	0,00046	EUR
Membrane Cleaning Solution	0,00035	EUR
Salt tabs	0,00075	EUR
Labor costs - production, packing	0,2	EUR
1 L ANOLYTE solution production cost	0,20455	EUR
Plastic dispenser	0,5	EUR

**1 L of ANOLYTE disinfection solution in plastic dispenser 0,70 EUR**