



Independent Testing: Polydex and Chlorine

Through independent testing and commercial deployment, Polydex has proven to have equivalent effectiveness and to surpass performance indicators of chlorine.

Equivalent Effectiveness

The Establishment Public Des Laboratoires Departmentaux, an independent testing laboratory in France tested and reported the bacteriostatic effectiveness of POLYDEX against 6 bacteria groups commonly used to evaluate drinking water quality using internationally recognized ISO test procedures. These tests confirmed that POLYDEX water treatment properly applied can reduce indicator bacteria (i.e. E.coli, Coliform, others) counts to zero.

PARAMETERS	UNITS	CONTROL	CHLORINE 0.2 mL/L	POLYDEX 2X1:120,000	MAXIMUM ALLOWABLE
1. Culturable micro-organisms 20 ϕ CISO 6222	UFC/1 ml	563	0	0	100
2. Culturable aerobic flora 36 ϕ CISO 6222	UFC/1 ml	544	0	0	20
3. E.coli and coliform bacteria NF EN ISO 9308-1	/100 ml	324	0	0	0
4. Thermotolerant coliform organisms 44 ϕ C NFT 90-414	/100 ml	318	0	0	0
5. Entestinal enterococci NF EN ISO 7899-2	/100 ml	217	0	0	0
6. Sulphite-reducing bacteria NF EN ISO 6461-2	/20 ml	15	0	0	1



Performance Advantages

The advantages using Polydex are clear. Chlorine disinfects instantly and indiscriminately. It is also unstable and short-lived. Polydex can be administered discriminately for pinpoint control eliminating unwanted micro-organisms while protecting those that are beneficial. Polydex also allows for long lasting protecting: it does not lose effectiveness due to instability but is consumed only in the process of killing target microorganisms allowing it to provide residual protection for extended periods. Unlike chlorine and other popular oxidants, POLYDEX's effectiveness is not diminished by UV rays.

Ozone and chlorine-based algaecides kill microorganisms by oxidation - a process widely documented to give rise to Trihalomethanes (THM). The U.S. Environmental Protections Agency has confirmed that THM can result in damage to the liver, kidney or central nervous system and carries increased risks of cancer. Polydex has no risk of producing THM and other potentially harmful secondary organic toxins.

For further information on this and other independent studies, please contact us at info@ocion.com.