

	CHLORINE COMPOUNDS	CHLORINE DIOXIDE	QUATS	ALDEHYDES	PEROXIDES	PEROXSIL Ag+
PRODUCT DESCRIPTION	Hypochlorites (e.g. bleach) or N-chloro compounds	ClO ₂	Quaternary ammonium compounds (e.g. benzalkonium chlorides)	Formaldehyde Glutaraldehyde	H ₂ O ₂	H ₂ O ₂ + Ag
MECHANISMS OF ACTION	Oxidation of SH-groups of vital enzymes. Denaturation of proteins.	Oxidation and denaturation of proteins.	Denaturation of proteins and inactivation of enzymes	Alkylation SH-groups of proteins Denaturation of proteins	Oxidation of DNA/RNA of microbes (20 times less effective than Peroxsil Ag+)	Oxidation of DNA/RNA of microbes
GERMICIDAL EFFICIENCY	Wide germicidal range. Does not remove biofilm	Wide germicidal range, but not sporicidal. Not effective biofilm remover	Limited germicidal activity, only effective against Gram+ bacteria, enveloped viruses and fungi. Not effective biofilm remover	Wide germicidal range. Does not remove biofilm	Wide germicidal range ineffective biofilm remover	Wide germicidal range. Removes biofilm
INEFFECTIVE AGAINST	amoebae, protozoa	amoebae, protozoa	gram neg. bacteria, myco-bacteria, spores, unshated viruses, amoebae, protozoa,	amoebae, protozoa,	ineffective biofilm remover	None
HEALTH & SAFETY PROFILE	Very toxic. THM production (carcinogenic)	Carcinogenic and genotoxic. Toxic by-products formed (e.g. chlorate, chlorite)	Low toxicity. No toxic by-products	Highly toxic (FA is carcinogenic) FA forms chloromathylether (carcinogenic)	Non-toxic	Non-toxic
ENVIRONMENTAL PROFILE	Very little biodegradability. Must be neutralised before drainage	Must be neutralised before putting to drain. Biodegradable.	Must be neutralised before putting to drain. Slowly biodegradable.	Readily biodegradable. Must be neutralised before putting to drain	Completely biodegradable	Completely biodegradable
MATERIAL COMPATIBILITY	Extremely corrosive to metals, rubbers and fabric	Corrosive	Only corrosive at high concentrations, but generally compatible with all types of materials	Not corrosive	Corrosive	Not corrosive
EFFECTIVE pH RANGE	5 - 9	5 - 9	5 - 9	4 - 9	2 - 8	2 - 8
REACTION TO WATER HARDNESS	good	good	poor	good	good	very good
STABILITY AFTER DILUTION	only short-term re-usable under certain conditions	only short-term not re-usable	only short-term not re-usable	only short-term not re-usable	good re-usable	very good re-usable
BIODEGRADABLE IN WATER PLANTS	very poor, neutralisation necessary	very poor, neutralisation necessary	90% after 5 days	good, but neutralisation necessary	100% after 1 - 2 hours	100% after 2 - 4 hours

WHY CONSIDER CHANGING YOUR CURRENT DISINFECTANT?

Because farmers have one of the highest cancer rates of all professions

Farmers are exposed to toxic chemicals more than anyone else. Pesticides, herbicides, fungicides and disinfectants are all things that mainstream farmers have come to rely on to keep their crops "healthy" – or at least that is what you've been led to believe.

But if these chemicals can do so much damage, why are we not more concerned about how much damage they are doing to us, and the environment?

Farmers have a much higher risk of developing non-Hodgkin lymphoma, leukemia, multiple myeloma and soft tissue sarcoma. They also have higher rates of brain cancer, stomach cancer, prostate cancer and skin cancer.

These cancers are all associated with work-related exposure to toxins. In addition to cancer, use of rotenone and paraquat also lead to an increased risk of Parkinson's disease. Organochlorine chemicals have also been found to increase the risk of diabetes and thyroid disease.

The Agricultural Health Study began in 1993 and is still in progress.

SOURCES: <https://thetruthaboutcancer.com/pesticides-and-cancer/>
<https://aghealth.nih.gov/about/index.html>
<http://www.panna.org/human-health-harms/cancer>

How Water Sanitation Can Damage Your Health

If you use municipal or disinfect borehole water with chlorine (calcium hypochlorite) you are exposing yourself to poisons 100 times more toxic than chlorine itself.

Something you may have never even heard of. Disinfection-by-products (DBPs) are contaminants found in nearly every water supply that adds chlorine.

That clear, clean-looking liquid you use every day – to quench your thirst, to bathe in, to wash your dishes and laundry – is far from the fresh, pure resource you might assume.

It is important to understand that chlorine itself is relatively benign and breaks down to chloride in your body, which is not much different from the chloride ion in salt. The problem is that it reacts with organic material already dissolved in the water, forming these far more toxic DBPs.

Protect you and your family with knowledge.
 Read on www.peroxsil.com/images/pdf/Chlorine-Report.pdf