

EndoSan[®]

Competitor Comparison

	PRODUCT DESCRIPTION	MECHANISMS OF ACTION	GERMICIDAL EFFICIENCY	GAPS IN ACTIVITY SPECTRUM	HEALTH & SAFETY PROFILE	ENVIRONMENTAL PROFILE	MATERIAL COMPATIBILITY
EndoSan	H ₂ O ₂ + Ag	Oxidation of DNA/RNA of microbes	Wide germicidal range. Effective biofilm remover	None	Non-toxic	Completely biodegradable (breaks down into H ₂ O and O ₂)	Not corrosive
CHLORINE COMPOUNDS	Hypochlorites (e.g. bleach) or N-chloro compounds	Oxidation of SH-groups of vital enzymes. Denaturation of proteins.	Wide germicidal range, but not effective in treating and removing biofilm	Efficacy depends on T, pH and organic matter	Very toxic THM production (carcinogenic)	Very little biodegradability Must be neutralised before putting to drain.	Extremely corrosive to metals, rubbers and fabric
CHLORINE DIOXIDE	ClO ₂	Oxidation and denaturation of proteins.	Wide germicidal range, but not sporicidal. Not effective biofilm remover	Efficacy depends on T	Carcinogenic and genotoxic Toxic by-products formed (e.g. chlorate, chlorite)	Biodegradable Must be neutralised before putting to drain.	Corrosive
QUATS	Quaternary ammonium compounds (e.g. benzalkonium chlorides)	Denaturation of proteins and inactivation of enzymes	Limited germicidal activity, only effective against Gram+ bacteria, enveloped viruses and fungi Not effective biofilm remover	Efficacy depends on T, pH, soil contamination and water hardness	Low toxicity No toxic by-products	Slowly biodegradable Problems associated with chemical in waste water	Only corrosive at high concentrations, but generally compatible with all types of materials
ALDEHYDES	Formaldehyde Glutaraldehyde	Alkylation SH-groups of proteins Denaturation of proteins	Wide germicidal range, but not effective biofilm remover	Efficacy depends on T, pH and organic matter	Highly toxic (FA is carcinogenic) FA forms chloromathylether (carcinogenic)	Readily biodegradable Must be neutralised before putting to drain	Not corrosive
PEROXIDES	H ₂ O ₂	Oxidation of DNA/RNA of microbes (20 times less effective than EndoSan)	Wide germicidal range effective biofilm remover	Short-term efficacy	Non-toxic	Completely biodegradable (breaks down into H ₂ O and O ₂)	Corrosive