

COMPARISON OF Freebac® D WITH OTHER DISINFECTANTS

Disinfectant Characteristic	FreeBac® D	SILVER PEROXIDE	CHLORINE	BROMINE	CHLORINE DIOXIDE	QUATS	HYDROGEN PEROXIDE
Long term effectiveness	very long practically independent of temperature	very long practically independent of temperature	short to long dependent on temperature	short to long dependent on temperature	short to long dependent on temperature	short to long dependent on temperature	No
Algicide Effect	yes	yes	yes	yes	yes	no	little
Fungicide Effect	yes	yes	yes	yes	yes	no	little
Sensitivity to light	practically none	practically none	effectiveness decreases with increasing temperature	effectiveness decreases with increasing temperature	light sensitive	none	yes
Effect on water pH	no	no	yes	yes	yes	no	no
Change in taste of treated water	no	no	yes	yes	yes	yes	no
Odour formation	no	no	yes	yes	yes	yes	no
Problem associated with chemical in waste water	no	Silver nitrate	yes, requires neutralisation	yes, requires neutralisation	yes, requires neutralisation	yes	no
Contact period to kill bacteria	short	Medium to long	short to average	short to average	short to average	short (high temps) high (low temps)	long
Reduced Effect from presence of organics	Yes slight	yes	yes	yes	yes	no	yes
Persistence of effect on growth of fungi and algae	yes	yes	limited	limited	average	yes	no
Chemical combination with other elements	no	no	yes	yes	yes	yes	yes
Toxicity of recommended dosage	no	Depends on silver level	yes	yes	yes	yes	no

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Risk in case of overdose	no	no	yes	yes	yes	yes	no
Foam formation	no	Depending on formulation	no	no	no	yes	no
Rinse off characteristics	good	good	good	good	good	bad	good
Dosing amount	Low/ little	little	little	little	little	average	high
Ease of measurement	good	good	good	average	average	poor	good
Long term stability	excellent	Excellent, but depends on formulation	good to poor depending on chemical used	as chlorine	poor	good	good
Shelf Life	excellent	Excellent, but depends on formulation	as above	as above	cannot be stored	average	short
Ease of dosing	requires dosing pump with degas head	Depending on formulation. requires dosing pump with degas head	conventional dosing	brominator conventional dosing	need custom system or generator	conventional system	requires dosing pump with degas head