OX-VIRIN versus VIROCID
COMPARATIVE STUDY

	OX-VIRIN	VIROCID
Composition	-25% Hydrogen Peroxide -5% Peracetic Acid -8% Acetic Acid -OX-VI Core (**OX-VIRIN E** also includes in its formulation surfactants to generate a thin layer of foam that increases the contact time and the penetration power, as well as many specific anticorrosive agents).	-17% Alkyl dimethyl benzyl ammonium chloride -7.8% Didecyl dimethylammonium chloride -10.7% Glutaraldehyde -14.6% Isopropanol
Packaging	Liquid disinfectant. New formulations: **OX-VIRIN E**, **OX-VIRIN READY TO USE.**	Liquid disinfectant. No specific formulations.
Efficacy and action spectrum	High level biocide efficacy tested against bacteria, fungi, viruses, algae, spores, protozoa, coccidia oocysts and other parasites. Satisfies the following UNE EN efficacy standards: 1040, 1275, 1276, 1650, 13697, 1656, 1657, 14675, 14476. Demonstrated efficacy under a wide range of factors (pH, temperature, etc.), even under hard conditions. Effective at low temperature.	Bactericide, fungicide, virucide, sporicide. High level efficacy but depending on work conditions. Reduced efficacy at temperatures < 10ºC. [1](See reference below)
Dosage	Usual recommended dosage: 0.25-1% Long shelf-life of the dilution mixture thanks to the action of the specific OX-VI Core.	Usual recommended dosage: 0.25-1%.
Mechanism of action	Complete destruction of microbial cell envelopes. Alteration of microbial metabolism, enzymatic equipment and nucleic acids. Its continuous use does not create microbial resistance.	Alteration of proteins and nucleic acids. Not cause total degradation of cells, so that microbial resistance phenomena can occur, being necessary rotation of product.
Environment	100% Biodegradable. Approved for organic production.	Very toxic and environmental hazard. **Not** 100% biodegradable.

Use	-Easy and convenient to use for handlers. -Rinse is not needed. -Easy control of residual by using colorimetric reactive test strips. -Non-corrosive at recommended dosage.	-Difficulty of management for handlers. -Non-corrosive at recommended dosage.
Other features	-It eliminates the biofilm covering the surfaces. **-Technical support and specific work protocols.** -Very fast action. -Versatile use. **-Suitable for use in disinfection processes throughout the food chain ("from farm to fork").** -Worldwide registrations: Europe, DEFRA, etc.	-

[1] **Reference: Taylor et al., (1999) *J Appl Microbiol* 87, 718-725**

Table 3 Results at 10 °C

Product type	Product code	Clean/ dirty	*Pseudomonas aeruginosa* Disinfectant in-use concentration × 0·5	× 1·0	× 2·0	*Escherichia coli* Disinfectant in-use concentration × 0·5	× 1·0	× 2·0
Quat	1	Clean	F	F	P	P	P	P
		Clean	F	F	P	P	P	P
		Dirty	F	F	P	F	P	P
		Dirty	F	F	P	F	P	P
Quat/glutaraldehyde	6	Clean	F	P	P	P	P	P
		Clean	F	P	P	P	P	P
		Dirty	F	P	P	P	P	P
		Dirty	F	P	P	P	P	P
Chlorine dioxide	10	Clean	F	F	P	F	F	P
		Clean	F	F	P	F	F	F
		Dirty	F	F	F	F	F	F
		Dirty	F	F	F	F	F	F
Peracetic acid/hydrogen peroxide	13	Clean	P	P	P	P	P	P
		Clean	P	P	P	P	P	P
		Dirty	P	P	P	P	P	P
		Dirty	P	P	P	P	P	P
Acid detergent/sanitizer	18	Clean	F	F	F	F	F	F
		Clean	F	F	F	F	F	F
		Dirty	F	F	F	F	F	F
		Dirty	F	F	F	F	F	F

P (pass), 5-log reduction or greater in viable counts; F (fail), less than 5-log reduction in viable counts; Quat, quaternary ammonium compound.