



**New GNx2 technology cleaning system is granted EPA  
registration as a Sanitizer/Virucide**  
(EPA Registration No. 069268-2)

GNx2 is a newly developed cleaning system that is a Hydrogen peroxide modified, reduced toxicity, Sanitizer/Virucide, multi-purpose cleaner/degreaser. EnvirOx Concentrate 118 is used at different water dilutions to provide highly effective cleaning across the entire range of janitorial cleaning; ie. *glass, floors, wipe down cleaning, general degreasing, bathroom & shower room cleaning, tile & grout cleaning and restoration, carpet spotting and extraction, stainless steel cleaning, odor destruction, mold & mildew cleaning.*

AOAC non-food sanitizer tests have demonstrated kill efficacy on: Staphylococcus aureus, Salmonella choleraesuis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Streptococcus faecalis, and Escherichia coli. Viral testing demonstrates kill efficacy on Herpes 2\*, Influenza A<sub>2</sub>/Japan, HIV-1 and HBV\*. Results of these tests are summarized in table #2.

EnvirOx Concentrate 118 provides a practical, reduced toxicity alternative to conventional janitorial cleaning systems. It is a viable new tool in the effort to provide buildings with a clean, safe working or living environment

\*Herpes 2 and HBV kill claim not applicable in California.

**Table #1****Envirox Concentrate 118 Environmental Impact chart**

	118 Concentrate	Window cleaner	General Floor cleaner	Deodorizer	Bathroom/tile cleaner	General degreaser	Sanitizer/virucide	
<b>Dilution ratio from product 118 Parts water to parts chemical</b>		128:1	128:1	64:1	13:1	13:1	13:1	
<b>Carcinogens (&gt;0.1%)</b>	none	none	none	none	none	none	none	
<b>Ozone depleting substances (Montreal Protocol)</b>	none	none	none	none	none	none	none	
<b>Phosphates</b>	0	0	0	0	0	0	0	
<b>Consumer VOC's**</b>	0.1%	0.006%	0.006%	0.008%	0.01%	0.01%	0.01%	
<b>Hazardous waste</b>	no	no	no	no	no	no	No	
<b>Skin irritation</b>	no	no	no	no	no	no	no	
<b>Eye irritation</b>	slight	no	no	no	no	no	No	
<b>Oral toxicity (LD<sub>50</sub>) of active ingredient</b>	>5000 mg/kg low toxicity	>5000 mg/kg low toxicity	>5000 mg/kg low toxicity	>5000 mg/kg low toxicity	>5000 mg/kg low toxicity	>5000 mg/kg low toxicity	>5000 mg/kg low toxicity	
<b>pH</b>	4.0-4.2	neutral	neutral	neutral	neutral	neutral	neutral	
<b>Flammability</b>	no	no	no	no	no	no	no	
<b>Biodegradable</b>	yes	yes	yes	yes	yes	yes	yes	
<b>Fragrance (non-turpin citrus)</b>	<0.5%	none	none	none	none	none	none	
<b>Aerosol</b>	no	no	no	Non	no	no	no	
<b>Packaging source reduction***</b>	58.7%	99.7%	97.9%		99.7%	96.7%	79.1%	
<b>Refillable containers</b>	no	yes	yes	yes	yes	yes	yes	
<b>Alkylphenyl ethoxylates (APE's)</b>	no	no	no	no	no	no	no	
<b>SARA 313 materials</b>	no	no	no	no	no	no	no	
<b>Glycol ethers</b>	no	no	no	no	no	no	no	
<b>Ammonia</b>	no	no	no	no	no	no	no	
<b>Chlorine bleach</b>	no	no	no	no	no	no	no	
<b>Amines</b>	no	no	no	no	no	no	no	

\*\* Consumer VOC's defined in EPA proposal 61 FR 14531 (April 2, 1996); Level on RTU's <7% of California VOC limits

\*\*\* Reduction over manually dilutable product in 1 gal plastic containers (150g/gal)

\*Herpes 2 and HBV kill claim not applicable in California.

**Table #2**

**Envirox Concentrate 118 Sanitizer/Virucidal Performance**

**Sanitizer**

The test run was for efficacy as a sanitizer on inanimate, non-food contact surfaces (EPA Guidelines DIS/TSS-10), which references the Official Methods of Analysis of the A.O.A.C., 12<sup>th</sup> edition. Results are based upon bacterial counts on tests of three different batches. An organic soil load of 5% blood serum was utilized.

<b><u>Bacteria</u></b>	<b><u>% Kill in 5 Minutes</u></b>
Staphylococcus aureus	99.9
Streptococcus faecalis	99.9
Salmonella choleraesius	99.9
Klebsiella pneumoniae	99.9
Escherichia coli	99.9
Pseudomonas aeruginosa	99.9

**Virucide**

This test was designed to conform with EPA Guidelines DIS/TSS-7 and ASTM test method E 1053-91. An organic soil load of 5% blood serum was utilized. A cytotoxicity control was run.

<b><u>Virus</u></b>	<b><u>Reduction of virus titer (logs)</u></b>
Herpes simplex II*	≥3.66
Influenza A <sub>2</sub>	≥3.00

**HIV**

This test was conducted to conform with EPA Pesticide Assessment Guidelines, Subdivision G: Product Performance, Section 91-2(f) and Section 91-30(d),(c). An organic soil load of 5% fetal bovine serum was utilized.

<b><u>Virus</u></b>	<b><u>Reduction of virus titer (logs)</u></b>
HIV-1	≥4.2

\*Herpes 2 and HBV kill claim not applicable in California.

**HBV\***

This test was conducted to conform with EPA GLP regulations as set forth in 40 CFR Part 160. The product was diluted to 25:1 in filter sterilized de-ionized tap water. An organic soil load of 100% duck Hepatitis B serum was utilized. EnvirOx Concentrate 118 demonstrated complete inactivation of the duck Hepatitis B virus following a five minute exposure time.

<b><u>Virus</u></b>	<b><u>Reduction of virus titer (logs)</u></b>
HBV*	<u>&gt;3.43</u>

**Table #3**

**CONSUMER VOC CONTENT\***

<b>PRODUCT</b>	<b>VOC %</b>
Light Duty (Green Dilution)	0.006 %
Heavy Duty (Red Dilution)	0.01 %

\*Defined 61 FR 14531

**Table #4**

**Sanitizer/Virucide Data Summary – EnvirOx Concentrate 118**

	<b>Light Duty</b>	<b>Heavy Duty</b>
Water dilution ratio	128:1	13:1
HIV	✓	✓
HBV*	-	✓
Sanitizer	-	✓
Virucide	-	✓

\*Herpes 2 and HBV kill claim not applicable in California.