



**ECO-LYTE NTL**  
Anolyte disinfectant

**1. DESCRIPTION**

*Eco-Lyte (NTL) – is the product of a patented ElectroChemical Activation process that mimics the chemistry of the human body’s natural defence system. The key active ingredient to Eco-Lyte’s advanced disinfection power is the compound Hypochlorous acid (HOCl) which is the same mild acid our body generates in response to infection. This biocompatibility results in a chemistry that is safe to use around humans, animals & food whilst being detrimental to pathogens.*

The formulation is scientifically known by a few terms: Anolyte, Electrolysed water, Super oxidized water, mixed oxidant solution etc. Please note; Eco-Lyte NTL is a specifically developed variant with unique meta-stable properties, produced with commercially viable & appropriate volumes of the active ingredient.

A multitude of applications exist and some of these are: non porous surface disinfection/sanitizing including medical and food contact surfaces & equipment, bio-security atmospheric atomization for indoor & access control points, food & beverage processing equipment & C.I.P, fresh produce washing & hydration, potable, process & waste water treatment, pre & post harvest pathogen control, tools, hands & a variety of equipment.

The product can be applied or used in processes that include: spraying, atomization & fogging, immersion, dipping, C.I.P and the production of ice.

No protective clothing is necessary for the handling of *Eco-Lyte (NTL)*.

The product is water based and consists of up to 99,69% Ionized H<sub>2</sub>O with the following factors at production

Description	Active ingredient mg/l	pH	ORP mV (redox- potential)
Neutral Anolyte	<500ppm	~5.5-7.5	>800mv+

Active substances	Wt/vol %	Symbols
Sodium Chloride	~0.26%	NaCl
Hypochlorous acid + Hypochlorite ion	<0.05%	HClO + OCl
Ionized Water	99.69%	H <sub>2</sub> O





## 2. STORAGE AND SHELF LIFE

*Eco-Lyte (NTL)* is a non-hazardous product (according to European Standard (88/279/EWG) and can be stored in a cool dry ventilated area. Inhalation of vapours directly from newly opened packaging following transit and agitation may prove irritating to airways. Avoid excess agitation and direct UV light if possible. Avoid combining with detergents or acidifying agents.

Shelf life is 6 months from production date. For best results use contents within 30 days of opening.

## 3. PACKAGING

- Supplied in 25 litre or 5 litre HDPE containers. Smaller packaging or bulk 1000l flow bin on request

## 4. MODE OF ACTION

Eco-Lyte NTL chemistry is characterized by a marked deficiency of electrons which promotes a tendency for electro- neutral environment by abstraction of electrons from the surrounding containments. If there are any micro-organisms in that environment or surface, Eco-Lyte NTL abstracts the electrons from their membrane disrupting their balance and thereby causing their death.

The active ingredient HoCl is neutral in charge and therefore disinfection kinetics take place, regardless of microorganism charge (+ or -). This destruction potential is limited to the "undesirables", whilst still being safe to human cells thanks to the chemistry being endogenous to our own biology. Eco-Lyte classifies as a biocidal agent that gives off oxygen.

An important characteristic of this group of agents is rapid action and ecologically acceptable break- down products of water & trace residual salt. Unlike many other disinfectant chemistries, viruses & bacteria cannot build a tolerance or mutate, therefore mitigating the risk of future resistance & creation of 'super-bugs'.

## 5. RECOMMENDED DILUTIONS AND USAGE

Due to the nature of *Eco-Lyte (NTL)* and its vast applications in a variety of industries, dilutions are application specific. Please contact your distributor or manufacturer for assistance with custom protocols. As with most disinfectants; higher strength (straight or 1:1) results in decreased contact time required, extended dilutions requiring longer contact time.

For new applications and environments or surfaces with potential biofilm apply higher strength product to commence breakdown of biofilm and/or repeat applications for the first few days. For best results ensure surfaces are free from soiling & organic matter.



As guidance:  
**Eco-Lyte (NTL) dilutions**

Application area	Oxidant range	% Eco-Lyte in diluting water	Example
Biosecurity- Tunnels 15sec +	+/- 100ppm	+/- 20%	1lt to 4lt water
Biosecurity Tunnels rapid	+/-200ppm	40-50%	1lt to 1.25lt water
ULV foggers – Indoor Decontamination -	+/-200ppm	40-50%	1lt to 1.25lt water
ULV Foggers – Indoor regular application	+/- 50 to 100ppm	10 to 20%	1lt to 4lt later
Non-porous surfaces (Clean)	+/-50 to 100ppm	10 – 20%	1lt to 4lt water
Nonporous surfaces – challenging/biofilm	200ppm+	40% to 100%	Straight or 1lt to 1lt water
Hand Sanitizer	200ppm+	50%	1lt to 1lt water
Mask Spray	200ppm+	50%	1lt to 1lt water
CIP	20 – 100ppm+ <i>Monitor ORP for 750mv+</i>	3-10%	3lt to 97lt water 10lt to 90lt water
Potable Water	0.5 – 2ppm	0.1 to 0.5%	1 to 4lt per 1000lt water
Produce Wash	20 to 100ppm	5 to 20%	40 to 200lt per 1000lt water

## 1. TYPICAL ANALYSIS

FORM ..... Liquid

COLOUR ..... Colourless

RESIDUE ..... None

FLASH POINT ..... None

ODOR ..... Mild Chlorine/Ozone Smell

pH..... Neutral (5.5 – 7.5)



## 6. PERFORMANCE BENEFITS

- Biocidal – Antibacterial, antiviral, sporicidal & effective against yeast & mould
- Highly efficient against biofilm
- Significantly reduces organic odours
- Septic tank & STP/WWTP friendly
- No additives are required to preserve a fresh, clean product.
- Non foaming, residue & in most instances rinse free
- Stability - Mixes easily with water forming a stable product
- Completely harmless to humans, animals and environment
- No hazardous restrictions on transporting or dispensing of product
- Use in solid, liquid and gaseous state

## 7. Efficacy Challenge Test

The following are examples of the viricidal & antimicrobial results attained with Eco-Lyte NTL

	Virus Control	Test	Inactivation Ration(%)
<b>Influenza A/H1N1 (Seasonal)</b>	8.32x10 <sup>6</sup> /mL	<100/mL	99.9988
<b>Influenza A (H3N2)</b>	4.8x10 <sup>5</sup> /mL	<100/mL	99.979
<b>2009 pandemic influenza A/H1N1</b>	2.7x10 <sup>5</sup> /mL	<100/mL	99.963
<b>Influenza B</b>	1.3x10 <sup>6</sup> /mL	<100/mL	99.992
<b>HSV-1</b>	1.155x10 <sup>7</sup> /mL	<100/mL	99.999
<b>Enterovirus 71</b>	TCID <sub>50</sub> =10 <sup>-4.6</sup>	TCID <sub>50</sub> <10 <sup>-1</sup>	99.98
<b>Coxsackie virus B5</b>	TCID <sub>50</sub> >10 <sup>-7</sup>	TCID <sub>50</sub> <10 <sup>-1</sup>	99.9999
<b>Echovirus 6</b>	TCID <sub>50</sub> =10 <sup>-5.88</sup>	TCID <sub>50</sub> <10 <sup>-1</sup>	99.987
<b>Adenovirus</b>	TCID <sub>50</sub> =10 <sup>-5.4</sup>	TCID <sub>50</sub> <10 <sup>-1</sup>	99.996

		Analyte (dilution rate)					
		1/1	1/2	1/10	1/20	1/50	1/100
<u>Acinetobacter baumannii</u>	1 min	-	-	-	+	+	+
	2 min	-	-	-	+	+	+
	5 min	-	-	-	-	+	+
	10 min	-	-	-	-	+	+
	30 min	-	-	-	-	+	+
<u>E. coli</u>	1 min	-	-	-	+	+	+
	2 min	-	-	-	+	+	+
	5 min	-	-	-	+	+	+
	10 min	-	-	-	-	+	+
	30 min	-	-	-	-	+	+
<u>Vancomycin resistant Enterococcus faecium</u>	1 min	-	-	-	+	+	+
	2 min	-	-	-	+	+	+
	5 min	-	-	-	-	+	+
	10 min	-	-	-	-	+	+
	30 min	-	-	-	-	+	+
<u>Kiebsiella pneumoniae</u>	1 min	-	-	-	+	+	+
	2 min	-	-	-	+	+	+
	5 min	-	-	-	-	+	+
	10 min	-	-	-	-	+	+
	30 min	-	-	-	-	+	+
<u>Pseudomonas aeruginosa</u>	1 min	-	-	-	+	+	+
	2 min	-	-	-	+	+	+
	5 min	-	-	-	-	+	+
	10 min	-	-	-	-	+	+

ISO 9001

BUREAU VERITAS  
Certification



**Blendwell**  
CHEMICALS (PTY) LTD

## 8. TECHNICAL SUPPORT

For health and safety information on this product please see Safety Data sheet. If further information is required, please contact [enquiries@blendwell.co.za](mailto:enquiries@blendwell.co.za)

ISO 9001  
BUREAU VERITAS  
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