

TECHNICAL DATA SHEET

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 names: Anolyte, Electrolysed Water, Super Oxidized Water, Mixed Oxidant Solution, etc. However, our brand Eco-Lyte (NTL) is a specifically developed variant with unique metastable properties and is produced with commercially viable and appropriate volumes of the active ingredient.

A multitude of applications exist, for example: non porous surface disinfection/ sanitizing including medical and food contact surfaces and equipment; biosecurity atmospheric atomization for indoor and access control points; food and beverage processing equipment and CIP; fresh produce washing and hydration; potable, process & waste water treatment; pre- and post-harvest pathogen control; tools, sanitising of hands and a variety of equipment. The product can be applied or used in processes that include: spraying, atomization, fogging, immersion, dipping, CIP, and the production of ice. No protective clothing is necessary for the handling of Eco-Lyte (NTL). No rinsing is required after treatment. The product is water based and consists of up to 99,69% Ionized H₂O

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%	HOCl + OCl
Water	99.69%	H ₂ O

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 opening packaging following transit & 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 six months from production date. For best results use contents within 30 days of opening.

PACKAGING

- Available for order in 1 litre, 5 litre or 25 litre containers; or
- Manufactured on-site.

MODE OF ACTION

Eco-Lyte (NTL) chemistry is characterized by a marked deficiency of electrons, which promotes a tendency for electroneutral 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 takes place, regardless of microorganism charge (+ or -). All of 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 (NTL) 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 and trace residual salt. Unlike many other disinfectant chemistries, viruses and bacteria cannot build a tolerance or mutate, therefore mitigating the risk of future resistance and creation of ‘super-bugs’.

RECOMMENDED DILUTION AND USAGE

Due to the nature of Eco-Lyte (NTL) and its vast applications in a number of industries dilutions are application specific. Please contact your distributor or manufacturer for assistance with custom protocols. As with most disinfectants; higher strength dilutions result in decreased contact time and extended dilutions require 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 A GUIDE: ECO-LYTE (NTL) DILUTIONS

Application Areas	Oxidant Range	% Eco-Lyte in Diluting Water	Example per Litre Eco-Lyte to Water
Biosecurity tunnels (15sec +)	+/- 100ppm	+/- 20%	1lt add 4lt water
Biosecurity tunnels (rapid)	+/-200ppm	40 to 50%	1lt add 1.25lt water
ULV foggers (indoor decontamination)	+/-200ppm	40 to 50%	1lt add 1.25lt water
ULV foggers (indoor regular application)	+/- 50 to 100ppm	10 to 20%	1lt add 4lt water
Non porous surfaces (clean)	+/-50 to 100ppm	10 to 20%	1lt add 4lt water
Non porous surfaces (challenging/biofilm)	200ppm+	40% to 100%	Straight or 1lt add 1lt water
Hand sanitiser	200ppm+	50%	1lt add 1lt water
Mask spray	200ppm+	50%	1lt add 1lt water
CIP	20 to 100ppm+ monitor ORP for 750mV+	3 to 10%	3lt add 97lt water 10lt add 90lt water
Potable water	0.5 to 2ppm	0.1 to 0.5%	1lt to 4lt / 1000lt water
Produce wash	20 to 100ppm	5 to 20%	40lt to 200lt / 1000lt water

TYPICAL ANALYSIS

Form	Liquid
Colour	Colourless
Residue	None
Flash Point	None
Odor	Mild Chlorine / Ozone smell
pH	Neutral (5.5 – 7.5)

PERFORMANCE BENEFITS

- Biocidal: antibacterial, antiviral, sporicidal and effective against yeast and mold
- Highly efficient against biofilm
- Significantly reduces organic odours
- Septic tank and STP/WWTP friendly
- No additives are required to preserve a fresh, clean product
- Non foaming, no residue and, 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

TECHNICAL SUPPORT

For health and safety information on this product please see SDS and Technical compliance documents.

For any other information please contact our technical support at Innogiene, Cape Town, South Africa: tania@innogiene.co.za or +27 (0)76 284 7878.