

Material Safety Data Sheet: 'NEW'

Section 1 Product and company identification

Trade name: **Neutral Electrolyzed Water ('NEW')**
Aquaox HOCL Solution

Manufacturer / Supplier:

Aquaox LLC., 6820, Lyons Technology Circle, Suite 205, FL-33073, USA. Tel: 561-623-9496, E-mail: info@aquaox.net, Website: www.aquaox.net

Section 2 Composition and information about ingredients

'NEW' contains active chlorine compounds such as HOCL and ClO⁻ in the range of 1-500ppm (0.001-0.05%) as well as various chlor-oxygen species that are short-lived when presented with an oxidant-demanding substance. The average/standard amount of active chlorine is 350ppm (0.035%).

Ingredient	CAS-No	EINICS-No	Wt/Vol %	Symbols
Sodium chloride	7647-14-5	231-598-3	0.260%	NaCL
Hypochlorous Acid	7790-92-3	323-323-5	0.045%	HOCL
Hypochlorite Ion	7681-52-9	231-668-3	0.005%	OCL ⁻
Water	7732-18-5	231-791-2	99.690%	H ₂ O

The solution contains no compounds as per the regulations for toxic compounds.

Section 3 Hazards identification

Main Hazards:

'NEW' in the strongest form (FAC ~500ppm) may cause slight irritation to the eyes, sensitive skin and throat. When the solution is stored in bottles, one should not try to smell or inhale the evaporations.

Health affects Eyes:

'NEW' in the strongest form may cause slight irritation to eyes.

Health effects Skin:

'NEW' in the strongest form may cause slight irritation to sensitive skin or open wounds.

Health effects ingestion:

Swallowing of the solution in its strongest form may cause slight irritation to a throat and digestive tract.

Health effects inhalation:

During generation of the solutions, particularly its strong form, unless there is adequate ventilation, there may be a build up of fumes that may cause dizziness and nausea.

Section 4 First aid measures

Eye contact:

Where irritation occurs, flush with cool fresh water

Skin Contact:

Where irritation occurs wash the skin with soap and water

Ingestion:

Drink cool fresh water to flush through and dilute

Inhalation:

Move to fresh air. If dizziness or nausea persists seek medical attention

Section 5 Fire-fighting measures

There are no special requirements for this solution. Not flammable

Section 6 Accidental release measures

Personal precautions:

Do not touch or breathe

Environmental precautions:

The solution is biodegradable and has a limited activation period.

Spillage:

Wipe up with disposable towels there are no special disposal instructions.

Section 7 Handling and Storage

Handling:

In the area where the solution is produced there should be good ventilation. Preferably local exhaust ventilation. For those with very sensitive skin it may be advisable to wear gloves.

Storage:

Liquid must not be stored. Point of use only!

Section 8 Personal protection and exposure control

Engineering control procedures:

Where 'NEW' is generated on site, some engineering solutions should be implemented to prevent the build up of fumes particularly if the production facility has inadequate ventilation. Mechanical fume extraction may be advised in this situation.

Documented process, safety control and personnel protection where necessary: gloves masks etc.

Respiratory Protection:

Where there is high risks to fumes build up due to inadequate ventilation in a processing area, a respirator should be worn.

Hand protection:

Where service personnel have sensitive skin the strongest solutions may cause irritation and therefore protective gloves should be worn.

Eye and facial protection:

There are no requirements

Body protection:

Normal industrial works wear to avoid exposed skin when handling neat strong solution

Section 9 Chemical and Physical Properties

Physical state:	Liquid
Color and Appearance:	Clear, transparent liquid (like water)
Odor:	Slight chlorine smell varying with the strength of the solution
Solubility in water:	Completely soluble
PH-values:	6.5 ± 0.5
Melting point:	0°C.
Boiling point:	100°C.
Fire-focus:	N/A
Flammability	None
Explosive:	N/A
Density:	appr. 1,000 kg.m ³
Steam-pressure:	appr. 2,330 Pa

Section 10 Stability and Reactivity

Stability:

Stable under all normal storage conditions

Materials to avoid:

The solution does not react with other materials

Hazardous decomposition products:

None

Section 11 Toxicological information

Acute toxicity:

Non-toxic

Irritant-Eyes:

Data for related material suggests this could produce conjunctivitis irritation

Irritant-Skin:

Data for related material suggests this may cause skin irritation

Reproductive and developmental:

None known

Skin contact:

The possibility of allergic sensitization should be considered

Chronic toxicity/Carcinogens:

None

Human Data: Inhalation may cause respiratory irritation

Section 12 Environmental information

Eco toxicity:

Destroys bacteria, spores, viruses and algae.

Degradability and Persistence:

Fully biodegradable.

Bioaccumulation:

None.

Mobility:

None.

Section 13 Disposal procedures

There are no special disposal procedures

Section 14 Transport procedures

Not classified as hazardous for transport

Section 15 Regulatory Information

Not listed

Section 16 Other Information

Under Section 3 of the Pesticide Regulations under the Federal Insecticide Fungicide and Rodenticide Act, as amended (FIFRA), the EPA regulates pesticides, which are registered and sold in interstate commerce to control various forms of vermin. Under these regulations Pesticide Devices are not required to be registered, but must have an approved label which meet the Section 3 Regulations, Part 162.10, and have a registered establishment in which they are produced. Under Section 7 of the FIFRA each owner of a pesticide device must produce to the EPA enforcement program a report of products produced each and every year and to whom they are sold in a standard report form.

Devices which everyone has heard about are electrically generated ozonators for use in treating drinking water, chlorinators which derive chlorine from the electrolysis of water and sale, copper/silver cathodes which by electrically activity cause release of silver and copper ions into drinking water in hotels and hospitals, invisible noise mechanisms which mediate insects and rodents in small areas. In each case the device is unique and based upon the data which the device originator has in hand or can reference to EPA has a product which is efficacious and safe when used as directed.

Devices are subject to labeling and misbranding requirements under FIFRA section 2(p) and 2(q); registration and reporting requirements under FIFRA section 7; recording keeping requirements under FIFRA section 8; inspection requirements under FIFRA section 9; import and export restrictions under FIFRA section 17; and child resistant packaging requirements imposed pursuant to FIFRA section 25 (c)(3).

Aquaox' pesticide device has an EPA establishment number and we report pursuant to Section 7 of the Act. Basically our device, using electric current 230 volt, produces Hypochlorous Ions (HOCL) on demand on site, which kills bacteria, mold, mildew, viruses and surface filling algae. The device uses sodium chloride (table salt) in a liquid format in water and an electric charge to generate on demand the chlorine. Chlorine does the killing of the life forms. When the electric has been turned off the device produces no chlorine and has no residual in it. Our device meets all the Section 3 labelling requirements and we pay close attention to all the FIFRA requirements so as to be fully compliant No product is produced from our device for storage or later use per regulations.

Aquaox' pesticide device does not require a hazardous use permit whereas chlorine in bottles must be permitted for filling, transportation or storage.