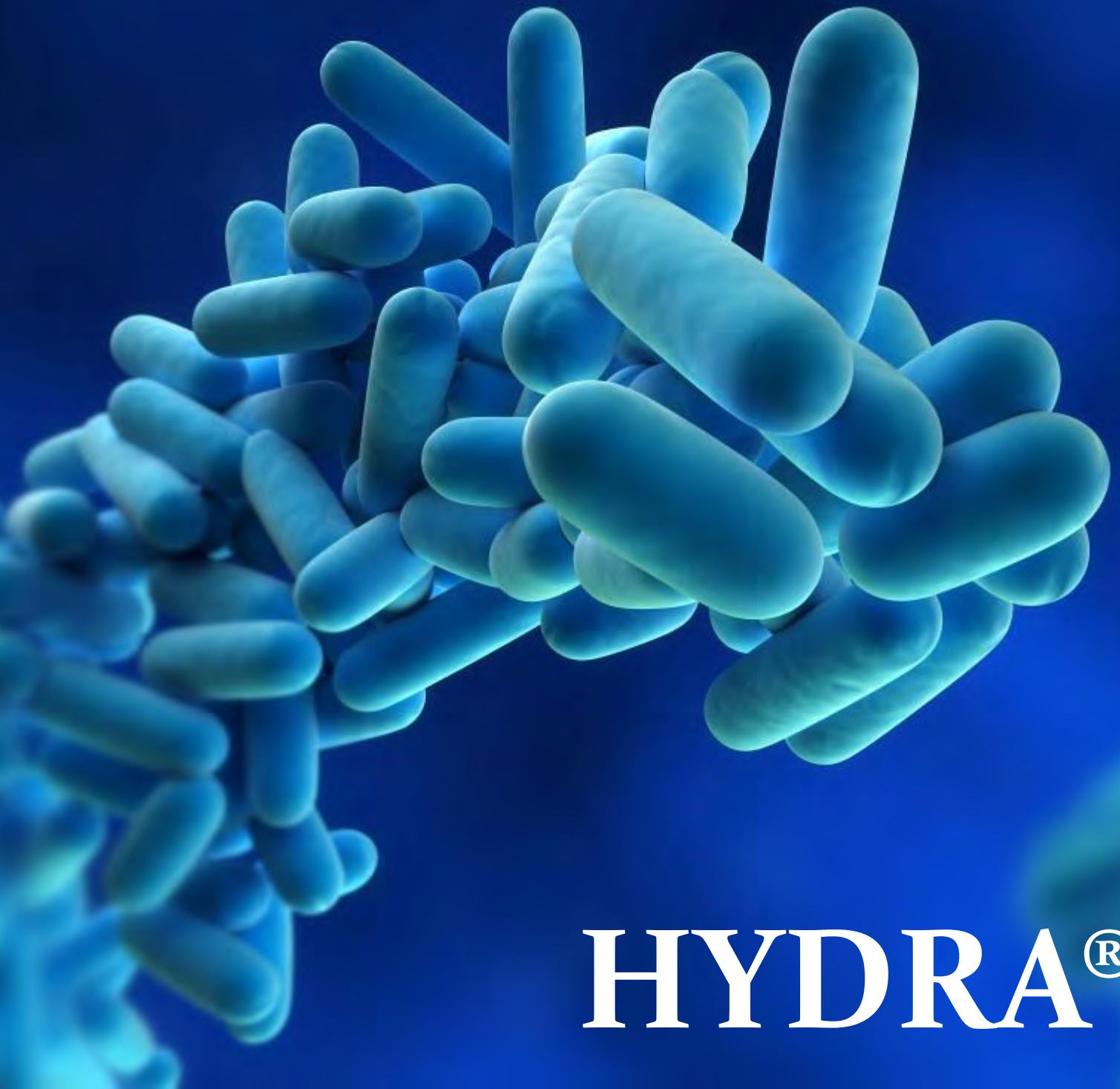


Hydra EBD



Eco Biocidal Disinfectant

**Environmentally Friendly Disinfectant, Kills
Legionella, Bacteria & Viruses - Fog, Spray or Soak**



HYDRA®

Features & Advantages

Benefits of Hydra EBD Water Treatment

The benefits of using **Hydra EBD** (30% Hydrogen Peroxide) water treatment are numerous. We've listed the top advantages for various industrial facilities below:

- Effective against bacteria and other organisms including Legionella, Pseudomonas, Viruses including Coronavirus, Moulds, Yeasts, Fungi.
- Kills iron bacteria and prevents bacterial slime from building up.
- There's no trace of chemical residues because peroxide decomposes fully into water, no rinsing required.
- Because hydrogen peroxide integrates into water immediately, it's also biodegradable.
- Improves main and secondary filtration, even under conditions with high organic-loads.
- Cleans organic deposits from irrigation systems.
- Removes any odours from the water caused by hydrogen sulphide gas.
- Peroxide also removes hydrogen sulphide which is corrosive to plumbing and other fixtures. Meaning that peroxide is lower maintenance.
- Non-toxic, non-corrosive.
- Residue can go straight to drain.

The Problems



Legionella water treatment is an important issue because legionella are bacteria which can cause severe pneumonia known as legionnaire's disease. This bacteria inhabits water lines, air conditioners, air washers, fountains and cooling towers.

Usually legionella are harmless. They only become hazardous when optimal temperatures allow their populations to flourish and they are in aerosolising water systems where they can be inhaled.



Problems with using chlorine

Chlorination is the most commonly used chemical for water treatment. It's thought to be a safe method for removing microorganisms from water.

But it's now believed that the oxidation and disinfection process produces carcinogenic compounds.

Those carcinogenic compounds have been found in chlorinated water. They can be absorbed through our skin as well as inhaled. Beyond its dangers to human health, it's also bad for the environment.

Advantages of using Hydrogen Peroxide

Hydrogen peroxide is a high-level disinfectant. It doesn't pose the same risks to humans or the environment.

Hydra EBD is an oxidizing agent that works quickly to release oxygen atoms and oxidize organic matter.

It's able to rid of just as many microbial forms as chlorine but in a much safer way.

Description

Hydra EBD is a stabilised hydrogen peroxide (H₂O₂) solution, it is a very effective biocidal agent, meaning that it kills all types of microorganisms when it comes into direct contact with them.

Hydrogen Peroxide is a strong oxidising agent and it kills microorganisms through this mechanism. It is used in all heavy duty applications where a 100% kill rate must be guaranteed.

The hydrogen peroxide molecule is by nature unstable, in that it will easily "fall apart" or dissociate into sub-components under ambient conditions.

The elemental oxygen (O₂) separated by the hydrogen peroxide, attacks the cell walls of all micro-organisms directly.

This chemical reaction between the oxygen and the cell wall molecules cause these to be denatured and destroyed. Eliminating any possibility of resistance by the micro-organism.

HIGHLY EFFECTIVE

Effective against highly contagious germs like Bacteria, Moulds, Yeasts, Fungi and other organisms including: Legionella, Pseudomonas, Viruses (all types), including Coronavirus, Viruses Enveloped (influenza, coronavirus etc).

And beyond these benefits, **Hydra EBD** hydrogen peroxide water treatment is also environmentally friendly.

It doesn't pollute water soils or harm aquifers.

In fact, it actually makes more oxygen for plants and soil to consume.

WHERE TO USE

Storage tanks and cisterns.
Emergency water disinfection.
Surface treatment of pipes and water tanks.
Portable water tank disinfection.
Municipal water stems and plants.
Automatic irrigation systems.

USED BY

Medical and Healthcare industries. Hospitality. Remediation of water damage. Meat and fish processing. Mould remediation.

Disinfection against Covid-19, bacterial endospores and a broad protozoan spectrum (bactericidal, mycobactericidal, tuberculocidal, virucidal, fungicidal, sporicidal).

APPLICATIONS

Surface disinfection, aerosol disinfection, room disinfection via vapourisation (VH₂O₂) fogging machines, spray disinfection, mould control.

ENVIRONMENTALLY FRIENDLY

When **Hydra EBD** is diluted with water the hydrogen peroxide molecule becomes unstable and will dissociate into its component parts which are water and oxygen.

Therefore there are no residues on disinfected surfaces and nothing to harm the environment, in soak tank applications used product can go straight to drain.

DILUTION

When making a working solution, always use this diluted solution within 24 - 48 hours.

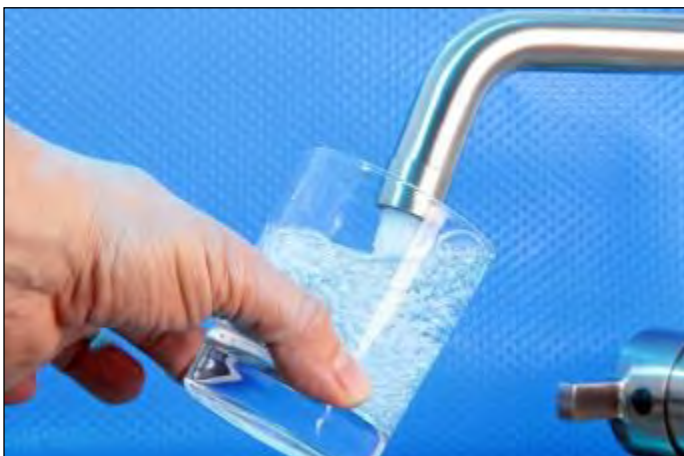
How To Use

Water Pipes & Tanks Disinfection, Cooling Tower, Air Washer, Irrigation System

Shock Treatment: 1000ml/m³.

Maintenance Dose: 25-1000ml/m³.

Leave to stand for minimum 4 hours.



Fogging (Dilute 1: 5.7 = 15% solution)

Cold Fogging: Use 8-15ml/m³ exposure min 2 hours.

Hot Fogging: Use 10-20ml/m³ exposure min 2 hours.

Surface Disinfection

Average organic load: 1:30 (3%).

Heavy contaminated surfaces: 1:15 (6%).

Highly contaminated areas with high organic load, to eliminate viruses and endospores 1:10 (10%).

Exposure Times:	3%	10%
Bacteria	15 min	5 min
Yeasts	15 min	5 min
Viruses Enveloped	0.5 min	0.5 min
Viruses Non-Enveloped	—	30 min
Spores	—	60 min

Laboratory Facilities

Hydra International Ltd.'s Research & Development Laboratories are a hub of activity where new products are developed and formulated. We have working relationships with our raw material suppliers, many of these suppliers are major world-wide chemical manufacturers with their own development laboratories.

As a company we are well known in the chemical industry for being receptive to cutting edge new chemicals which can be incorporated into our products to achieve performance advantages. An important part of the International Standards that we hold is that of constant improvement. We show that we have achieved this at every independent audit.



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