ozoklenz

THE SCIENCE BEHIND AQUEOUS OZONE

NATURALLY POWERFUL. NATURALLY SAFE. NATURALLY MADE.

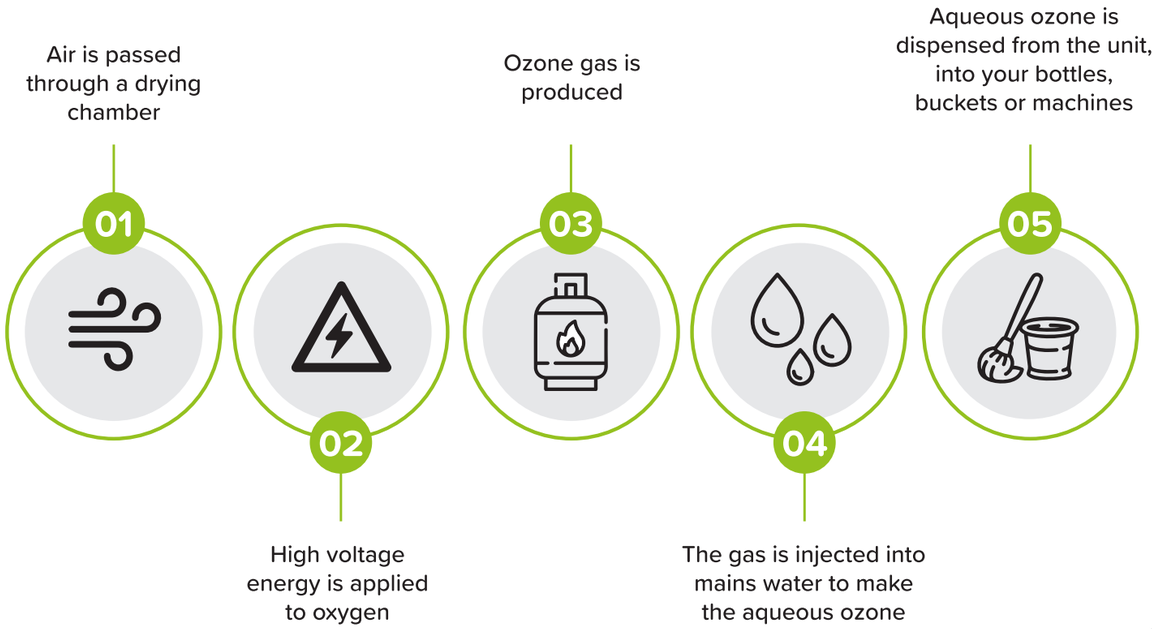
ozoklenz

What is Aqueous Ozone?

Aqueous ozone is a cleaning and sanitising solution derived from a naturally occurring process. In nature, ozone (O_3) forms when oxygen molecules (O_2) are split by lightning, creating oxygen atoms (O) that bond with other oxygen molecules. This process produces ozone, a highly reactive and powerful oxidiser.

When ozone is dissolved in water, it creates aqueous ozone, a solution that combines ozone's antimicrobial properties with water's versatility. This process is replicated using technology that generates ozone by applying an electrical charge to oxygen and infuses it into water. The result is a safe, efficient, and eco-friendly cleaning solution.

How Aqueous Ozone Works



Benefits of Aqueous Ozone

Aqueous ozone offers a modern alternative to traditional chemical-based cleaning. Its benefits stem from its safety, simplicity, and environmental sustainability.

Key Advantages

Aqueous ozone offers a modern alternative to traditional chemical-based cleaning. Its benefits stem from its safety, simplicity, and environmental sustainability.

Chemical-Free:
Replaces conventional chemical cleaners, reducing exposure to harsh substances.

Environmentally Friendly:
Breaks down into water and oxygen after use, leaving no toxic residues.

Cost-Effective:
Produces on-demand cleaning solution on-site eliminating the need for chemical purchases, storage or handling.

Versatile:
Works across a range of surfaces, including stainless steel, glass, and ceramic, as well as porous materials.

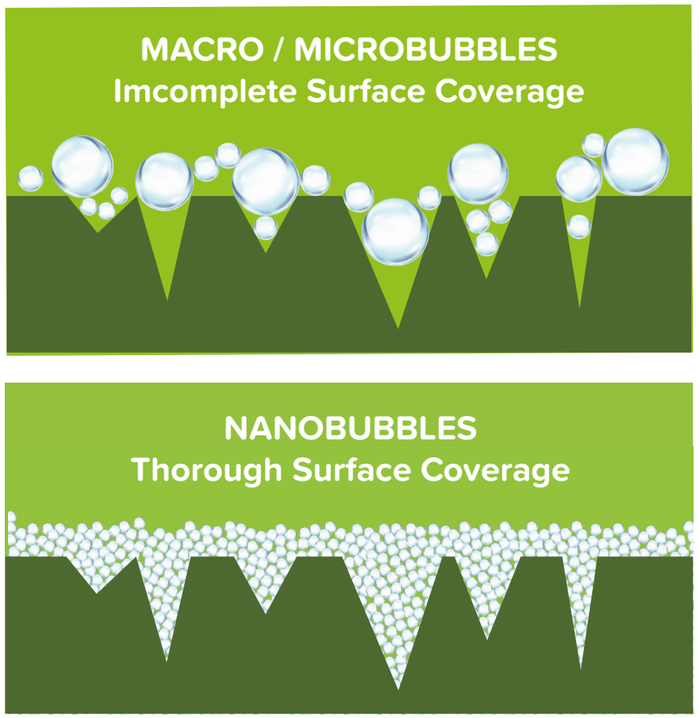
Highly Effective:
Achieves a log reduction of up to 99.999% and meets EN 16615, EN 1276 and EN 14476.

Nanobubbles:
Improving Aqueous Ozone's Performance

Nanobubbles are a vital component of some aqueous ozone systems, designed to improve the efficiency and effectiveness of the solution. These microscopic bubbles improve ozone distribution and stability, making the cleaning process more thorough.

What Are Nanobubbles?

Nanobubbles are gas-filled bubbles smaller than 200 nanometres in diameter. Unlike conventional bubbles, which quickly rise and burst, nanobubbles remain suspended in water for extended periods, ensuring even distribution of the dissolved gas.

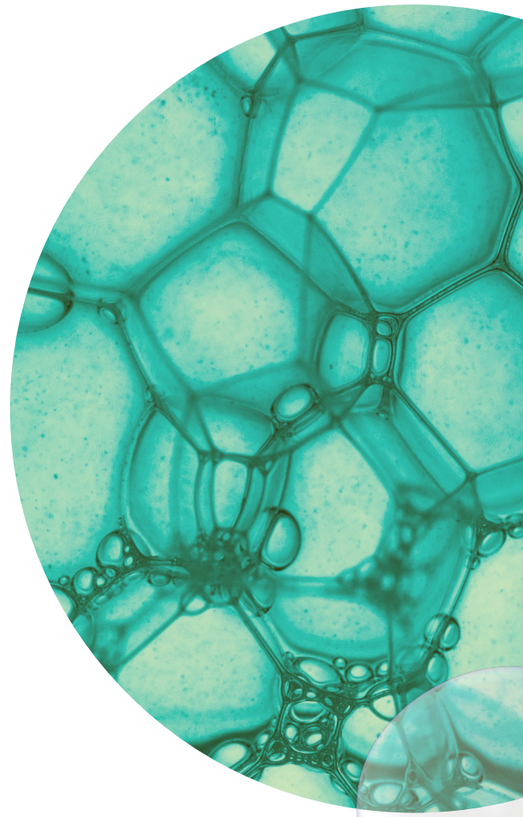


How Nanobubbles Are Created

Ozone Infusion:
Ozone gas is dissolved into water under pressure.

Stabilisation:
Specialised equipment creates nanobubbles that hold the ozone within the solution longer.

Durability:
Nanobubbles maintain their structure, helping the solution stay effective throughout its use.



Why Nanobubbles Matter

Thorough Surface Coverage:
Nanobubbles ensure that the cleaning solution covers every part of a surface, even microscopic crevices.

Extended Effectiveness:
They keep ozone dissolved longer, ensuring consistent performance during cleaning.

Increased Oxidation:
When nanobubbles collapse, they release energy that enhances the cleaning power of the solution.

Nanobubbles enable aqueous ozone to work more effectively in challenging applications, including porous surfaces or hard-to-reach areas.

Applications of Aqueous Ozone

Food Processing:
Clean and sanitise food preparation areas, equipment, and surfaces safely and efficiently.

Healthcare:
Disinfect medical equipment and facilities while meeting strict hygiene standards.

Industrial Cleaning:
Suitable for machinery, tools, and high-traffic surfaces.

Everyday Cleaning:
An excellent option for homes, offices, and public spaces, offering effective cleaning without harsh chemicals.

A Practical and Sustainable Cleaning Solution

Aqueous ozone, supported by nanobubble technology, represents a forward-thinking approach to cleaning and sanitisation. It delivers effective results without the environmental and health risks associated with traditional chemical-based methods. The ability to general a powerful cleaning agent on-demand reduces costs and simplifies operations.

Whether for industrial, commercial, or everyday applications, aqueous ozone provides an efficient, safe, and eco-conscious way to maintain cleanliness and hygiene.

ozoklenz

Call: 01494 793 414

Email: hello@ozoklenz.com

www.ozoklenz.com

NATURALLY POWERFUL. NATURALLY SAFE. NATURALLY MADE.