

MAJESTY

Organic concentrated peracids for water and wastewater treatment

GLOBAL CHALLENGES

Water quality is one of the main challenges that societies will face during the 21st century, threatening human health, limiting food production, reducing ecosystem functions, and hindering economic growth. Water quality degradation translates directly into environmental, social and economic problems. The availability of the world's scarce water resources is increasingly limited due to the worsening pollution of freshwater resources caused by the disposal of large quantities of insufficiently treated, or untreated, wastewater into rivers, lakes, aquifers and coastal waters.

Safe and clean water is a Human right! 75% of all diseases in developing countries arise from contaminated drinking water.

Due to relatively low cost, chlorine products based are considered the most common way of treating water from micropollutants. Such disinfectants produce by products such as ions, aldehydes, ketones, ketone acids, Trihalomethanes, AOX and lots of toxic byproducts.

TARGET

Atomes target is to develop a new patented food grade technology, efficient, broad spectrum fast acting, low cost, biodegradable, environmental friendly, safe, non-toxic, non-harsh, non-corrosive and non-carcinogenic as an alternative to all dangerous disinfectants. Our product name is **MAJESTY**.



DESCRIPTION & USAGE

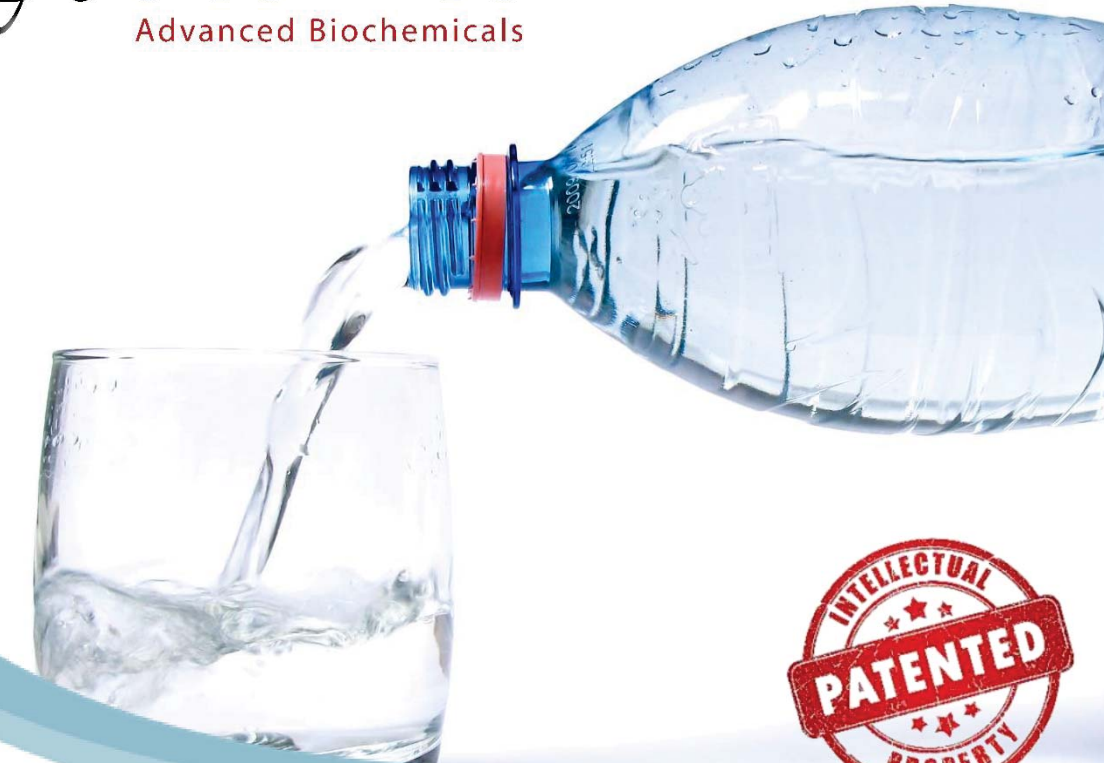
Atomes **MAJESTY** is an odourless equilibrium mixture of 20% peracids, hydrogen peroxide, food Grade stabilizers and biopolymer to act as a sequestering, wetting and penetrating agent.

MAJESTY product is considered as a single product, no need to generate in situ, it follows the strategy dose and go. The product was developed with a shelf life increased up to 2 years. Accordingly, no need for a generator, precursors, temperature and reaction time to produce the technology. **MAJESTY** will always be delivered at 20% accurate concentration of Peracids.

The Powerful oxidizing power of the Peracid destroys cell wall, DNA and proteins. Efficient against non-enveloped viruses, enveloped viruses, gram + bacteria, gram – bacteria, yeast, mold and algae. Atomes Peracid is approved for usage between 0.1 to 10 ppm.



Relative oxidization potential for common disinfectants	
COMPOUND	OXIDATION POTENTIAL (Ev)
Ozone	2.07
Majesty	1.81
Chlorine Dioxide	1.57
Sodium Hypochlorite (Chlorine)	1.36



STUDIES & RESULTS

Disinfection with Atomes **MAJESTY** is a very rapid process. It takes couple of minutes to kill.

Most of the studies made by Laboratoires ecologique reveals an inhibition (MIC) of most pathogenic organism between 0.1 ppm to 2 ppm of peracids (PA)

Example:

- E. coli MIC at 0.2 ppm of PA
- Salmonella spp MIC at 2 ppm of PA
- Bacillus spp MIC at 0.4 ppm of PA

APPROVALS

MAJESTY is approved by:

- Canadian Food Inspection Agency
- Eco-Seal Certified

ADVANTAGES

- Patented
- Food grade disinfectant and odorless
- Chlorine-Free disinfection
- High efficiency at low dosage rates
- Fast acting, reduced kill time
- Biodegradable
- Safe, Non-toxic and non-harsh
- Non-corrosive
- Non-carcinogenic
- Single product, no need for generators
- Dosed with single, simple dosing pump
- Shelf life 2 years