

OZONE



KANTI INDUSTRIES



OZONE AN INTRODUCTION

Ozone is O_3 , three atoms of oxygen linked together, rather than the two atoms of oxygen, O_2 . Ozone kills bacteria by rupturing the cell wall of the offending organism. While ozone is very powerful, it has a very short life cycle. When it is faced with odors the extra atom of oxygen destroys them completely by oxidation and it convert back to Oxygen.

APPLICATION OF OZONATION

As awareness increasing for uses of Ozone as disinfectant in various applications. Ozone is strongest oxidant which is easily available and has no side effect or by-products as of Chlorine and other have. Here are some applications;

1. Packaged water treatment,
2. Waste water treatment,
3. Swimming pool water treatment,
4. Food processing units,
5. Fish ponds and aqua culture,
6. Laundries,
7. Hotels and Hospitals,
8. Pharmaceutical Industry

OZONE PROPERTIES

PROPERTY	OZONE	VS. OXYGEN
Molecular Formula:	O_3	O_2
Molecular Weight:	48	32
Color:	light blue	colorless
Smell:	<ul style="list-style-type: none">• Clothes after being outside on clothesline• Photocopy machines• Smell after lightning storms	<ul style="list-style-type: none">• Odorless
Solubility in Water @ 0° C:	0.64	0.049
Density (g/l):	2.144	1.429
Electrochemical Potential, V:	2.07	1.23

TYPICAL O₃ HALF-LIFE VS. TEMPERATURE

Dissolved in Water (pH 7)

TEMP (C)	HALF-LIFE
15	30-minutes
20	20-minutes
25	15-minutes
30	12-minutes
35	8-minutes

* These values are based on thermal decomposition only. No wall effects, humidity, organic loading or other catalytic effects are considered.

OZONE SOLUBILITY

The solubility of ozone depends on the water temperature and the ozone concentration in the gas phase: Units in mg/l or ppm.

O ₃ GAS	5o C	10°C	15°C	20°C
2%	14.79	13.00	11.19	8.57
5%	48.79	40.00	32.19	25.57
10%	99.10	89.50	83.79	76.86



Over a decade’s experience and research on Ozonation systems for various industries and for various applications, Kanti industries launches new series of high performance Ozonators. These Ozonators are truly made for Indian hot and humid conditions. These give you consistent performance over the years of uses. Based on high frequency high density corona discharge Ozone generation principal. It gives you higher Ozone concentration in the same capacity Ozonators of other manufacturers. As easy maintenance, compact size and light weight we can deliver our machines in any part of world. Round the clock technical backup for Ozone solutions. Dedicated after sale services for quick and prompt response for any problem in our Ozonators.

We can deliver Ozonators from 2 gm/hr upto 500 gm/hr capacities. We can provide customized solutions for any application to any industry. As Ozonation use increasing rapidly in various industries we provide complete solution rather than just a machine.

ADVANTAGES OF OUR OZONATORS

- 1. Based on high frequency high density corona discharge technology, which give higher concentration in the same capacity of ozonators of other manufacturers.
- 2. Highly durable Ozone Cells, not burnt out even in high humidity conditions. Truly make for Indian conditions.
- 3. Compact and light weight, easy to transport and installation.
- 4. Easily replaceable spare parts, no need to call for engineer’s visit for repairing.
- 5. Very low maintenance.
- 6. Compatible accessories of Ozonation system like venvturi injectors, NRVs, mixing pumps etc.
- 7. Complete protection of Ozone Power generation system from voltage fluctuations.
- 8. Stainless Steel enclose for long life of Ozonator.



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