



HOW SAO **WORKS**

This patent-protected technology creates Stabilized Aqueous Ozone (SAO), an effective, innovative and sustainable cleaning, deodorizing, and sanitizing solution. SAO attacks organic matter, breaking it down into smaller particles and suspending it in solution.

HOW SAO **CLEANS**

Stabilized Aqueous Ozone (SAO) attacks organic matter, primarily carbon-carbon double bonds of organic molecules, breaking it down into smaller particles and suspending it in solution.

- Molecules vary in their reactivity to ozone, depending on the chemical bonds present and other factors.
- SAO reacts mainly with the unprotonated amino group of the acids. The site of attack on cysteine and methionine by O_3 is at the sulfhydryl rather than the amino group. Reactions of O_3 with aliphatic amino acids form nitrate, ammonia, and one or two carbon atom-containing carbonyl and carboxylic by-products. In the ozonolysis of peptides and proteins, oxidation by SAO occurs at the tyrosine, tryptophan, histidine, cysteine, and methionine residues. Oxidation of proteins results in changes in their folding ability and tertiary structures.
- With proteins, SAO causes the oxidation or the ozonolysis of certain amino acid residues, for instance, tryptophan, tyrosine and cysteine.
- Spectrophotometric studies have shown that the amino acids Met, Trp, Tyr, Cys, His, and Phe are most susceptible to oxidation by SAO in aqueous solutions.

HOW SAO **KILLS**

When applied to surfaces, SAO (ozone in a stabilized, aqueous form), kills the germs that can also cause odours. When ozone (O_3) molecules make contact with the cell wall of bacteria & viruses, tiny holes are created. This reaction is called oxidation.

Oxidation is germ killing - and it's what makes SAO so powerful!

Cleaner • Deodorizer • Sanitizer



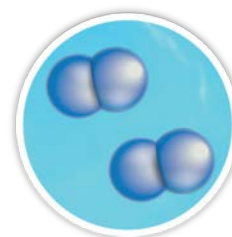
Step 1

Oxygen (O_2) from the air is safely turned into O_3 , then invades into ordinary cold tap water.



Step 2

SAO is attracted to germs, soils, and bacteria and quickly eliminates contaminants.



Step 3

SAO cleans for days and safely reverts back to water and O_2 .