

WHAT IS REDUCED OXYGEN PACKAGING (ROP)?

ROP is a process where oxygen in a package is reduced to a level below that normally found in the surrounding atmosphere.

Benefits of ROP

- Prevents the growth of spoilage organisms
- Reduction of fat oxidation and rancidity
- Reduction of preparation and clean-up times



Types of ROP



- Vacuum Packaging
- Modified Atmosphere Packaging (MAP)
- Controlled Atmosphere Packaging (CAP)
- Cook Chill
- Sous Vide

Food Safety Concerns with ROP

Clostridium botulinum: causes botulism, which is a deadly illness

- Those associated with fish may grow at 38°F
- Those associated with red meat, poultry, pork, and vegetables may grow at 50°F
- Does not grow at pH 4.6 or less and Aw<0.94

Listeria monocytogenes: causes listeriosis, which has a high mortality rate

- Grow at temperatures as low as 31°F
- Does not grow at pH 4.4 or less and Aw<0.92

Requirements for ROP

Any retail food facility using ROP is required to have a HACCP plan!



Exception: If the food is labeled with the production time/date, held at 41°F or lower during refrigerated storage, and is removed from its package in the food facility within 48 hours after packaging.



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