

Chlorine Dioxide vs Ethylene Oxide

	Chlorine Dioxide Gas	Ethylene Oxide
	Non-carcinogenic	Carcinogen
Explosivity	Non-explosive	Explosive 
Antimicrobial Classification	Sterilant	Sterilant
Pre-Conditioning Requirements	Occurs within the chamber and is typically, 60 minutes or less No heat is necessary 65% relative humidity	Occurs outside of the chamber and is typically, 12-72 hours Product and packaging must withstand 48°C 65% relative humidity
Type of Cycle	Vacuum or Ambient	Vacuum
Necessary Cycle Parameters	Humidification Gas Concentration Total Dosage	Heat Moisture Gas Concentration Time
Aeration Requirements	Occurs within the chamber Minutes in length 	Requires separate aeration rooms Aeration in highly heated environments of 50-60°C lasts 12-48 hours Aeration in 20°C last for 5-14 days
Residuals	No harmful residuals	Carcinogenic residuals With risk of egress