

ANSUL INERGEN SYSTEMS

Product Profile

Comparison: High Pressure CO₂ - Argon/ Argonite - INERGEN Agent

Agent	CARBON DIOXIDE (850 psi)	ARGON/ NITROGEN ARGONITE	INERGEN Agent (2175 psi)
Physical properties	Odorless and colorless	N ₂ / AR/ AR - N ₂ Odorless and colorless	N ₂ , Ar, CO ₂ Odorless and colorless
Physical form when stored at ambient temperature	Liquid	Gas	Gas
Design concentration	34-75% volume	34-50% volume	34-50% volume
Extinguishing characteristics	Oxygen reduction	Oxygen reduction	Oxygen reduction (CO ₂ increased to enhance respiration, brain blood flow and body oxygenation)
Oxygen content	Drops from 21% to 15% or less	Drops from 21% to 12% as established by EPA	Drops from 21% to 12% as established by EPA
Visibility during discharge	Severe reduction	No effect	No effect
Personnel Safety	Atmosphere will not sustain life	CO ₂ added to enhance and stabilize respiration, brain blood flow and body oxygenation. Demonstrated people compatible and life safe beyond established limits.	CO ₂ not added. Progressive hypokia, life safe at exposure duration and concentration established limits.
Temperature drop	Cold shock and possible formation of frost on sensitive components	Minimal	Minimal
Pre-discharged alarm/time delay required	Yes. Although CO ₂ is normally used for non-occupied spaces	As determined by NFPA Standard 2001	As determined by NFPA Standard 2001
Post-discharge agent removal	Cross ventin; otherwise floor air extraction	Normal ventilation or cross ventilation	Normal ventilation or cross ventilation
Verification of agent quantity in storage cylinder	Weighing each cylinder	Pressure check each cylinder	Pressure check each cylinder
Class C capability	Electrically nonconductive	Electrically nonconductive	Electrically nonconductive
Alarm requirements	Must be audible, visual, or olfactory	Must be audible and/ or visual as defined by NFPA Standard 2001	Must be audible and/ or visual as defined by NFPA Standard 2001
Types of discharge delay	Mechanical or electronic	Electronic control panel	Electronic control panel
Manifold piping requirements	ASTM A-53 or A-106; 1/2" and 3/4" Schedule 40; 1" and larger Schedule 80		ASTM A-53 or A-106 Schedule 80; Size may dictate specific type and grade required
Manifold fitting requirements	Class 300		Class 300
Requirements for piping beyond the manifold	ASTM A-53 or A-106; 1/2" and 3/4" Schedule 40; 1" and larger Schedule 80		ASTM A-53 or A-106 Schedule 40; Pressure may dictate specific type and grade required
Requirements for fittings beyond the manifold	Class 300		Class 300
System discharge time	60 seconds		
Environmental effect	Environmentally compatible	Environmentally compatible	Environmentally compatible