

SYSTEM COMPARISON CHART

ITEM	DESCRIPTION	Halocarbons (FM200, NAF,others)	Inert Gases (Nitrogen(N2), Inergen, Argonite, others)	Condensed Aerosols (FIREPRO)
1	TYPE OF FIRE (A,B,C)	A,B,C	A,B,C	A,B,C,F
2	METHOD OF EXTINGUISHING	- Largely by Thermal Reduction - To some extent by Stopping the Chain Reaction in combustion	- Reduction Oxygen below 15%	- By Inhibiting the Chemical Chain Reaction in combustion, at molecular level
3	INERTING CAPABILITIES – NO REIGNITION	YES	YES	YES
4	DECOMPOSITION PRODUCT	YES (Hydrogen Fluoride)	None	YES (Minor - Potassium Compounds of Neutral pH)
5	DESIGN CONCENTRATION	6.25% or 7% By Volume	Minimum 51%	Class A w/out S.F.: 76.4g/m ³
6	CHEMICAL COMPOSITION	Heptafluoropropane (HFC227ea)	Pure Nitrogen	K ₂ CO ₃ (Potassium Carbonate) KNO ₃ (Potassium Nitrate) Others - traces
7	EXTINGUISHING ABILITY WITH DOOR/ WINDOW OPEN	Affected	Affected	Affected but not as the gases – more dense
8	EFFECT WITH HIGH CEILING	Max. = 7.3m	No	Max = 8m
9	ENVIRONMENT EFFECT	YES See EU Directives on HFC ban	NO	NO Green Labeled
10	GLOBAL WARMING POTENTIAL (GWP) – IPCC 2001	3500	0	0
11	OZONE DEPLETION POTENTIAL (ODP)	0	0	0
	ATMOSPHERIC LIFETIME	36.5 year		negligible
12	RISK TO OCCUPANTS DUE TO ACCIDENTAL DISCHARGE	YES	YES	NO
13	SYSTEM APPLICATION	Total Flooding In Enclosure	Total Flooding In Enclosure	Total Flooding In Enclosure
14	ELECTRICAL NON-DISCHARGE	YES	YES	YES
15	DISCHARGE DISRUPTION	NO	NO	NO
16	SYSTEM INSTALLATION	Complicated	Difficult	Easy
17	VISIBILITY WHILE DISCHARGE	Not Clear	Clear	Not Clear
18	DISCHARGE TIME	10 Sec.	Within 1 Min.	10 – 20 Sec.
19	OCCUPIED AREA	YES	YES	YES
20	PRESSURE AT CYLINDER	360 PSI (24.82 BAR)	200-300 BAR	Non-Pressurized
21	PIPING INSTALLATION	- SCH 40 Seam	-SCH 40 & 80 Seamless	None

		- Fitting Class 300	-Fitting Class 3000	Not Required
22	STANDARD OF SYSTEM	UL, FM, LPCB, BS, EPA	Vds, JIS	NFPA, ISO, CEN, IMO, BRL, UL
23	LISTINGS OF SYSTEM	UL, VdS		ULC, KIWA, ANPI, BSI,EPA
24	MANUFACTURING (AGENT ONLY)	GREAT LAKES-CHEMTURA / DUPONT	-	FIREPRO SYSTEMS LTD
25	REFILL PRICE, THB/ ROOM VOLUME	1,200 THB/ M ³	(200 Bar) 175 THB / M ³	NOT APPLICABLE – 15 YEAR CERTIFIED LIFETIME

As per IPCC Third Assessment Report (TAR) of 2001 the GWP of FM200 is 3500 and not 2900 (that was in the 2nd Assessment Report - SAR) [IPCC Third Assessment Report - Climate Change 2001 - Complete online versions | UNEP/GRID-Arendal - Publications - Other](#)