



PHYSICAL PROPERTIES

PROPERTIES	UNITS	22	134a	142b
Chemical name		Chlordifluormethane	1,1,1,2-Tetrafluoroethane	1- Chlor- 1,1 -difluoroethane
Chemical formula		CHCIF2	CF3-CH2F	CCIF2-CH3
CAS number		75 -45-6	811-97-2	75-68-3
Molecular weight		86,5	102.0	100,5
Boiling point	°C	-40,8	-26.3	-9,2
Melting point	°C	-160		-130,8
Critical temperature	°C	96	101.1	137,1
Critical pressure	bar	49,8	40.6	41,19
Specific density liquid at 20 °C	g/cm3	1,21		1,12
Viscosity liquid at -15 °C	mPa.s	0,264		0,43
Flammability		non flammable	Non Flammable	flammable
Ignition temperature	°C	-	-	632
Lower explosion limit	% volume in air	-	-	6
Upper explosion limit	% volume in air	-	-	18
Thermal conductivity (gas phase)	W/mK	0,011 (20 °C)		0,012 (20 °C)
Vapor pressure at				
20 °C	bar absol.	9,1		2,9
50 °C	bar absol.	6,8		19,4
Solubility in water	g/l	1,9 (21 °C)		3 g/l (259,1

MAFRON 22

UN No.	1018
Class	Non flammable Gas 2 (2.2)
Chemical Name	Difluoro Chloro Methane
Specifications	Conforms to IS 5610 (1983), as amended, & ARI 700 Specifications.
Phase out	R-22 is subject to phase out as an HCFC under the Montreal Protocol Regulations as applicable to India.

APPLICATIONS

Residential & Commercial air conditioning.

Medium & Low Temperature Commercial Refrigeration.

Display Cabinets for Food Stuffs.

Food Processing.

Mobile Refrigeration Systems.

As an input in the manufacture of PTFE.

As an input in the manufacture of Inhalation Anesthetics.

As an intermediate in Pharmaceuticals and Agro chemicals.

Blowing Agent in manufacture of Extruded Polystyrene Foam sheets for Construction Industry.

MAFRON 134a

UN No.	3159
Class	Non flammable Gas 2 (2.2)
Chemical Name	1,1,1,2 Tetrafluoro Ethane
Specifications	Conforms to IS 5610 (1983), as amended, & ARI 700 Specifications.
Phase out	Environmentally acceptable.

APPLICATIONS

Refrigerant in Refrigeration & Airconditioning.

Medium & High Temperature Stationary Commercial Refrigeration, Chiller Equipment & Home Appliances.

Refrigerant in Mobile Airconditioning systems.

Blowing Agent in manufacture of Extruded Polystyrene Foam sheets for Construction Industry.

Propellant in Medicinal Dose Inhalers (MDI).

NAVIN FLUORINE INTERNATIONAL LIMITED



22/142b BLEND

UN No.	1078
Class	Non flammable Gas 2 (2.2)
Chemical Name	1- Chlor- 1,1 – difluorethane / Dufluoro chloro Methane
Phase out	22/142b Blend is subject to phase out as an HCFC under the Montreal Protocol Regulations as applicable to India.

APPLICATIONS

Blowing Agent in manufacture of Extruded Polystyrene Foam sheets for Construction Industry.