FORANE® 408A

CAS No. 354-33-6 (HFC-125) /420-46-2 (HFC-143a) / 75-10-5 (HFC-22)

Pentafluoroethane (HFC-125) / 1,1,1-Trifluoroethane (HFC-143a) / Chlorodifluoromethane (HCFC-22)

GENERAL DESCRIPTION

Near azeotropic HFC blend with a zero ODP designed to replace R-22 in many applications such as unitary A/C, chillers, and some refrigeration. It operates at a much higher pressure and capacity than R-22. Equipment, therefore, must be designed to handle R-410A.

SPECIFICATIONS

(Meets AHRI 700-2017 Specifications)

	Maximum (unless otherwise indicated)	Tolerance
Pentafluoroethane (HFC-125), wt %	7.0 (nominal)	±2.0 %
1,1,1-Trifluoroethane (HFC-143a), wt%	46.0 (nominal)	±1.0 %
Chlorodifluoromethane (HCFC-22), wt %	47.0 (nominal)	±2.0 %
Air and Other Non-condensable Gases, vol %	1.5	
Volatile Impurities, wt %	0.5	
High Boiling Residue, vol %	0.01	
Moisture (H_2O), ppm by wt	10	
Acidity, ppm by wt (as HCl)	1.0	
Chloride, no visible turbidity (indicates about 3 ppm)	Pass	
Particulates / solids (visually clean to pass)	Pass	

PROPERTIES

Appearance	Colorless liquefied gas
Odor	Faint, ether-like odor
Molecular Mass (g/mole of blend)	87.01
Bubble Point at 1 atm	-48.3°F / -44.6°C
Dew Point at 1 atm	-47.4 °F / -44.1°C
Flammable Limits (LFL, UFL), vol % (1 atm, 25°C)	NA / NA
ANSI/ASHRAE Standard 34 Safety Group Classification	A1
Ozone Depletion Potential (ODP) (CFC-11 = 1.0)	0.026
Global Warming Potential (GWP[1]) (CO_2 = 1.0)	3,257

(1) GWP according to IPCC AR5. Values for 100-year time horizon

TEMPERATURE

	50°F	70°F	105°F	115°F	130°F
Vapor Pressure, psia[2]	110.4	151.3	248.5	283.2	342.1
Liquid Density, lb./ft^3[2]	69.8	67.1	61.8	60.1	57.1

(2) Generated using NIST REFPROPVersion 9.1

Forane® Customer Service: 1-800-245-5858

BEFORE HANDLING THIS MATERIAL, READ AND UNDERSTAND THE SDS (SAFETY DATA SHEET) FOR ADDITIONAL INFORMATION ON PERSONAL PROTECTIVE EQUIPMENT AND FOR SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION.

FORANE® REFRIGERANTS BY ARKEMA

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