

FORANE® 410A
DIFLUOROMETHANE (HFC-32) / PENTAFLUOROETHANE (HFC-125)

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 700-2011 Specifications)

	Maximum (unless otherwise indicated)	Tolerance
Difluoromethane (HFC-32), wt %	50.0 (nominal)	-1.5%/+ 0.5%
Pentafluoroethane (HFC-125), wt %	50.0 (nominal)	-0.5%/+1.5%
Air and Other Non-condensable Gases, vol %	1.5	
Volatile Impurities, wt %	0.5	
High Boiling Residue, vol %	0.01	
Moisture (H ₂ O), 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)	72.59
Bubble point at 1 atm	-60.5°F / -51.4°C
Dew Point at 1 atm	-60.5°F / -51.4°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
Global Warming Potential (GWP) (CO ₂ = 1.0)	2,100

Temperature	<u>50°F</u>	<u>70°F</u>	<u>105°F</u>	<u>115°F</u>	<u>130°F</u>
Vapor Pressure, psia ⁽¹⁾	157.3	215.8	355.6	405.9	491.5
Liquid Density, lb./ft ³⁽¹⁾	70.4	67.3	60.7	58.4	54.3

⁽¹⁾ generated using NIST REFPROP Version 9.0

CAS Number: 75-10-5 (HFC-32) / 354-33-6 (HFC-125)

Customer Service: 1.800.245.5858

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

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