

**FORANE® 407A**  
**DIFLUOROMETHANE (HFC-32) / PENTAFLUOROETHANE (HFC-125) / 1,1,1,2-TETRAFLUOROETHANE (HFC-134a)**

**GENERAL DESCRIPTION**

A zero ODP zeotropic HFC blend which closely matches the properties of R-22. It can be used in many A/C and refrigeration applications in new or retrofitted R-22 installations. Polyolester lubricants should be used with R-407A due to immiscibility with mineral oil or alkylbenzene.

**SPECIFICATIONS**

**(Meets AHRI 700-2011 Specifications)**

	Maximum (unless otherwise indicated)	Tolerance
Difluoromethane (HFC-32), wt %	20.0 (nominal)	± 2%
Pentafluoroethane (HFC-125), wt %	40.0 (nominal)	± 2%
1,1,1,2-Tetrafluoroethane (HFC-134a), wt %	40.0 (nominal)	± 2%
Air and Other Non-condensable Gases, vol %	1.5	
Volatile Impurities, wt %	0.5	
High Boiling Residue, vol %	0.01	
Moisture (H <sub>2</sub> 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)	86.20
Bubble point at 1 atm	-45.3°F / -49.5°C
Dew Point at 1 atm	-38.9°F / -38.0°C
Flammable Limits (LFL, UFL), vol % (1 atm, 25°C)	Not Applicable
ANSI/ASHRAE Standard 34 Safety Group Classification	A1
Ozone Depletion Potential (ODP) (CFC-11 = 1.0)	0
Global Warming Potential (GWP) (CO <sub>2</sub> = 1.0) (100 year)	2,100

<b>Temperature</b>	<b>50°F</b>	<b>70°F</b>	<b>105°F</b>	<b>115°F</b>	<b>130°F</b>
Vapor Pressure, psia <sup>(1)</sup>	100.8	141.7	242.1	278.8	341.8
Liquid Density, lb./ft <sup>3</sup> (1)	75.5	72.6	66.6	64.7	61.4

<sup>(1)</sup> generated using NIST REFPROP Version 9.0

**CAS Number:** 75-10-5 (HFC-32) / 354-33-6 (HFC-125) / 811-97-2 (HFC-134a)

**Customer Service: 1.800.245.5858**

June 11, 2012

**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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