

FORANE® 407C

CAS No. 75-10-5 (HFC-32) / 354-33-6
(HFC-125) / 811-97-2 (HFC-134a)

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-407C due to immiscibility with mineral oil or alkylbenzene.

SPECIFICATIONS

(Meets AHRI 700-2017 Specifications)

	Maximum (unless otherwise noted)	Tolerance
Difluoromethane (HFC-32), wt %	23.0 (nominal)	± 2.0 %
Pentafluoroethane (HFC-125), wt %	25.0 (nominal)	± 2.0 %
1,1,1,2-Tetrafluoroethane (HFC-134a), wt %	52.0 (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 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)	86.20
Bubble Point at 1 atm	-46.5°F / -43.6°C
Dew Point at 1 atm	-33.9°F / -36.6°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 ¹) (CO ₂ = 1.0)	1,625

(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⁾	93.5	132.0	226.8	261.6	321.3
Liquid Density, lb./ft ³ (2)	74.8	72.0	66.5	64.7	61.6

(2) Generated using NIST REFPROP Version 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.

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