



# Opteon<sup>®</sup> XP44

**Product Information Bulletin  
For Transport Refrigeration**





**Opteon® XP44 (R-452A) is a non-ozone depleting, low Global Warming Potential (GWP) hydrofluoro-olefin based refrigerant developed to replace R-404A/R-507A in positive displacement, direct expansion low and medium temperature transport applications. Opteon® XP44 is suitable in new equipment as well as for retrofit of existing systems, offering comparable energy efficiency with improved environmental properties but without increased compressor discharge temperatures.**

### **Applications**

- Low and medium temperature transport DX refrigeration
  - Refrigerated trucks
  - Refrigerated vans
  - Reefer containers
- Low and medium temperature commercial and industrial DX refrigeration
- New equipment/retrofit of existing systems

### **Benefits**

- Non-ozone depleting and lower GWP (approx. 50 % reduction vs. R-404A/R-507A)<sup>1)</sup>
- No increase in compressor discharge temperature compared to R-404A
- Comparable energy efficiency vs. R-404A/R-507A
- Provides quick, easy and low cost retrofit from R-404A/R-507A
- Safe and non-flammable (ASHRAE<sup>2)</sup> A1)
- Approved and adopted by major equipment manufacturers
- Alternative to R-407 series low and medium temperature refrigerants
- Miscible with POE lubricants
- Can be topped off after leaks

*1) According to Assessment Report 4 (AR4) which is the basis for the F-Gas regulation (EU) No. 517/2014.*

*2) American Society of Heating, Refrigerating and Air-Conditioning Engineers*



## Opteon® XP44 properties

ASHRAE Number	R-452A pending
Composition Wt %	R-32/R-125/R-1234yf 11.0/59.0/30.0
Molecular Weight	103.5 g/mol
Boiling Point @ 1 atm (101.3 kPa)	-47.0 °C
Critical Pressure	4002 kPa
Critical Temperature	74.9 °C
Liquid Density @ 70 °F (21.1 °C)	1148.8 kg/m <sup>3</sup>
Ozone Depletion Potential (CFC-11 = 1.0)	0
AR <sub>4</sub> Global Warming Potential (CO <sub>2</sub> = 1.0)	2141
ASHRAE Safety Classification	A1
Temperature Glide	~3 K



For further information on Opteon® XP44 refrigerant, including retrofit guidelines, please visit [opteon.com](http://opteon.com) or [www.refrigerants.dupont.com](http://www.refrigerants.dupont.com) or contact your local Opteon® representative.

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