



Opteon™ XP10

Refrigerant

Product Information

Opteon™ XP10 (R-513A) is a non-ozone depleting, low global warming potential (GWP) hydrofluoro-olefin (HFO)-based refrigerant developed to replace R-134a in positive displacement, direct expansion, medium-temperature commercial and industrial chillers, as well as flooded and/or centrifugal chillers. Opteon™ XP10 is an excellent capacity and efficiency match for R-134a in new systems, as well as for retrofit of existing systems, offering an optimal balance of properties including high energy efficiency and environmental sustainability.

Applications

- Medium-temperature circuit of hybrid cascade systems
- Medium-temperature commercial and industrial DX refrigeration
- Water chillers, air conditioning, and heat pumps
- Ice rinks
- New equipment/retrofit of existing systems

Benefits

- Low GWP: 56% reduction compared to R-134a⁽¹⁾
- Excellent capacity and energy efficiency match to R-134a
- Close performance match to R-134a for retrofit and new systems
- Azeotrope with zero glide
- Safe and nonflammable (ASHRAE⁽²⁾ A1)
- Approved by major equipment and component manufacturers

- Extensively field tested with no equipment/lubricant/seal changes (superheat adjustment may be required)
- Compatible with existing R-134a equipment design/lubricants
- Retrofit solution for HCFC service blends, such as R-401A, R-401B, and R-409A
 - Oil change and seal replacement is necessary when retrofitting systems running on HCFC service blends.

⁽¹⁾According to Assessment Report 5 (AR5)

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

Opteon™ XP10 Properties

ASHRAE Number	R-513A
Composition	HFO-1234yf/R-134a
Weight %	56.0/44.0
Molecular Weight	108.4 g/mole (108.4 lb/lb mole)
Boiling Point at 1 atm (101.3 kPa)	-29.2 °C (-20.6 °F)
Critical Pressure	3766 kPa [abs] (546.2 psia)
Critical Temperature	96.5 °C (173.7 °F)
Liquid Density at 21.1 °C (70 °F)	1185.7 kg/m ³ (74.0 lb/ft ³)
Ozone Depletion Potential (CFC-11 = 1.0)	0
AR5 Global Warming Potential	573
ASHRAE Safety Classification	A1
Temperature Glide	0 °R (0 K)

For more information on the Opteon™ family of refrigerants, or other refrigerants products, visit opteon.com or call (800) 235-7882.

The information set forth herein is furnished free of charge and based on technical data that Chemours believes to be reliable. It is intended for use by persons having technical skill, at their own risk. Because conditions of use are outside our control, Chemours makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe, any patents or patent applications.

© 2018 The Chemours Company FC, LLC. Opteon™ and any associated logos are trademarks or copyrights of The Chemours Company FC, LLC. Chemours™ and the Chemours Logo are trademarks of The Chemours Company.

Replaces: K-28826
C-10020 (1/18)