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)

Chemours™

LOW GWP ©

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

Replaces: K-28826
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