HFC-32: Next generation refrigerant that helps reduce global warming

HFC-32 (difluoromethane) is a chemical used in pure form as a refrigerant in air conditioning and heat pump systems. It is considered the most balanced next generation refrigerant for residential and commercial air conditioners, cooling and heat pump systems.

Environmental Benefits of HFC-32

1.5 Times Higher Heat Transfer Capacity of HFC-32

Key environmental benefits of HFC-32 go beyond its Global Warming Potential (GWP) value, which is about one third of R-410A. One of the important features of refrigerants is their heat transfer capacity. HFC-32 possesses about 1.5 times higher heat transfer capacity than R-410A, which means that its charge volume can be up to 30% smaller than existing refrigerants, depending on the model design.

As a result, the potential global warming impact (GWP x charge volume) can be up to 75% less than that of R-410A. HFC-32 can improve energy efficiency by 5-10% depending on models.

2088

100%

HFC-32

Lower potential global warming impact than R-410A

100%

473

R-410A

HFC-32

Charge Volume (kg)

Global Warming Potential (GWP)

Potential Global Warming Impact (GWP x kg)

Key Characteristics

HFC-32 is a next generation refrigerant that addresses a range of environmental considerations in a balanced manner.

- Lower Global Warming Potential (GWP) – about one third of R-410A
- More energy efficient
- Easier to reclaim, recycle and reuse
- Less chemical is needed in each air conditioning or heating unit
- Safe (low flammability)
- Easy for installers and technicians to handle

Worldwide Usage

HFC-32 is currently being used in more than 6 million air-conditioning units in more than 40 countries worldwide, including Japan, India, Australia, Thailand and several other Asian, Middle East and European countries.

Daikin is the leading global innovator and provider of advanced, high-quality air conditioning, refrigeration and heat pump solutions for residential, commercial, and industrial applications. For more information, please visit www.daikin.com