



# Freon™ MO99™ (R-438A) and Freon™ NU-22B™ (R-422B)

Refrigerants

## Frequently Asked Questions

### Can Freon™ MO99™ or Freon™ NU-22B™ be mixed with R-22?

No. There is no such thing as a “drop in” replacement for R-22. Mixing refrigerants is not recommended. R-22 replacements should not be used to top off R-22 systems. R-22 should be recovered using appropriate equipment and managed according to U.S. EPA guidelines specified in Section 608 of the U.S. Clean Air Act.

### What oil can be used with Freon™ MO99™ or Freon™ NU-22B™?

Freon™ MO99™ and Freon™ NU-22B™ are designed for use with mineral oil and do not require the use of POE oil. However, there are several R-22 replacements that do require the use of POE oil to ensure proper oil return. Always refer to the refrigerant manufacturer’s written guidelines.

### Will I need a new gauge set?

No. Freon™ MO99™, Freon™ NU-22B™, and R-22 have very similar pressure characteristics; therefore, the same gauge sets can be used.

### If Freon™ MO99™ or Freon™ NU-22B™ leaks, do I need to recover and charge with virgin refrigerant?

Systems running with Freon™ MO99™ can be topped off repeatedly with Freon™ MO99™, and systems running with Freon™ NU-22B™ can be topped off with Freon™ NU-22B™ with no change in flammability rating or noticeable performance change. However, as when maintaining and

servicing any system, refrigerant leaks should be located and repaired as soon as possible.

### Freon™ MO99™ and Freon™ NU-22B™ contain a hydrocarbon. Does that make them flammable?

No. Freon™ MO99™ and Freon™ NU-22B™ have an A1 refrigerant safety classification designating: (A) Lower Toxicity and (1) No Flame Propagation under ASHRAE Standard 34. Freon™ MO99™ and Freon™ NU-22B™ have proven to be safe and reliable replacements for R-22 in existing equipment globally.

### How does the charge amount of Freon™ MO99™ or Freon™ NU-22B™ compare to that of R-22?

The initial charge amount should be 85-90% of the original system charge. The final charge will vary by system, but will be approximately the same weight as with R-22. After the system has stabilized, Freon™ MO99™ or Freon™ NU-22B™ may be added until design subcooling is achieved. Once design subcooling is achieved, adjust TXV to achieve designed superheat.

### Will R-22 replacements work in large tonnage equipment?

Yes. Freon™ MO99™ and Freon™ NU-22B™ have proven field experience running in large tonnage equipment. Pre-conversion data is recommended to ensure that the system is running at designed capacity.

For more information on Freon™ refrigerants, visit [freon.com](http://freon.com)

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