

# PRESERVING OUR FUTURE AND YOUR COMFORT WITH R-454B

Energy-efficient heating and cooling  
with greater respect for our environment.

Less than three decades ago, worldwide concerns about ozone layer depletion led to a major shift in refrigerants used for heating, cooling and refrigeration. Meetings were held, laws were changed, and in the early 2000's, Tempstar transitioned to R-410A refrigerant, as one of the first HVAC manufacturers to go all-in on a non-ozone depleting refrigerant.

Today, as worldwide concern over global warming continues to rise, most nations, including the United States, are adopting stricter controls over the global warming potential (GWP) of refrigerants. That's why, for all ducted and ductless residential and light commercial products, we are going all-in on a new refrigerant designed to keep you comfortable while dramatically lowering its global warming potential (GWP) – and that is R-454B.

## THIS DEVELOPMENT DIDN'T HAPPEN OVERNIGHT

We anticipated the need to reduce the GWP of refrigerants more than a decade ago. Now, after years of research, development, and field-testing, we are more than ready to meet the new requirements. We plan to transition the majority of our product line to R-454B ahead of the EPA's expected 2025 deadline.

**R****454B**

A new refrigerant for a better future

## Committed to Sustainability

With R-454B, Tempstar proudly displays our commitment to environmental stewardship. It's a refrigerant that delivers a 75% decrease in global warming potential while maintaining original R-410A's non-ozone depleting properties. It makes for a pretty darn good air conditioning or heat pump system, too.



## Putting it in Perspective

To provide a little perspective, switching all of our residential and light commercial systems to R-454B would be roughly the equivalent of avoiding the greenhouse gas emissions from over 5 million gas-powered passenger vehicles for one year.\* That's a big impact!



\* Assuming Carrier Corporation residential, DLS and light commercial units shipped with refrigerant annually.  
<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

## Committed to Quality and Safety

Without doubt, R-454B is a different refrigerant than R-410A. So different, in fact, it falls into a new classification on the industry's flammability scale – A2L. A2L is a label for chemicals that are considered “mildly flammable”. While that label might grab your attention, millions of A2L systems are already operating safely in the United States in window air conditioners, car air conditioners, and coming soon, central air conditioners and heat pumps.

To give you an idea of what “mildly flammable” looks like, consider the following:

- R-454B is so mildly flammable that there must be a direct flame source and a high concentration of refrigerant to create a flame.
- If R-454B were to ignite, the flame would be unsustainable.
- A R-454B flame would spread at an extremely slow speed – less than half a mile per hour – you can walk faster than that!
- R-454B is less flammable than many substances found in homes such as rubbing alcohol or nail polish remover.



A2L refrigerants are safely used every day in millions of window units and car and truck AC systems.

## Peace of Mind Built In

Our 100+ years of experience in heating and cooling are rooted in our ability to provide high-quality indoor comfort technology that is energy-efficient, reliable, and above all, safe. To provide peace of mind for customers like you – and the thousands of Tempstar installers and service technicians who handle our equipment every day – products designed for use with R-454B have been built with a “safety first” mentality:

- All new Tempstar products with R-454B include factory-installed leak dissipation systems to meet new UL requirements.
- All new Tempstar products with R-454B have been designed to eliminate ignition sources

These measures have been implemented over and above our already best-in-class testing for every product we make.



## COMMITTED TO YOU

Tempstar is committed to enhanced dependability and innovation in home comfort. Every time we tweak, tinker or totally re-tool any of our products, it is done with the same level of care and attention to detail that has made us one of the most recognizable names in the heating and cooling industry. Now, as we transition our ducted and ductless residential and light commercial products to R-454B, we are doing so with the greatest respect to your comfort and satisfaction.

Manufacturer reserves the right to change specifications on its products without notice.

**TEMPSTAR**  
Heating and Cooling Products

A Proud Member of the Carrier Family

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