

“Using R-448A, we met the GreenChill certification requirements, improved efficiency, and have had zero issues. What’s not to like?”

– Pete Marotta  
Director of Sustainable Store Planning and Refrigeration,  
Grocery Outlet Bargain Market

## Installing Honeywell Solstice® N40 (R-448A) Refrigerant Helped Grocery Outlet Bargain Market Earn GreenChill Gold Certification

The store improved efficiency and reduced its environmental impact

### THE OPPORTUNITY

Improvements in energy efficiency and the need to comply with environmental regulations are key issues for all supermarkets. When planning a new Grocery Outlet Bargain Market store in Los Angeles, the company sought a cost-effective, simple solution to achieve both goals.

### THE SOLUTION

Grocery Outlet Bargain Market selected Honeywell Solstice® N40 (R-448A) refrigerant not only because it was affordable and met their environmental goals, but also because it let them use existing equipment for seamless installation.

### A True Bargain

With the title of Director of Sustainable Store Planning and Refrigeration for a value-themed retailer named Grocery Outlet Bargain Market, it’s a safe bet that efficiency is an essential part of Pete Marotta’s world. “Our locations are independently operated stores, typically by families. Anything we can do to lower their refrigeration costs makes a big impact on their bottom lines. We take that very seriously.”

Part of that commitment to efficiency was the selection of Honeywell Solstice N40 (R-448A) refrigerant for a new location that opened in Los Angeles in February, 2018. “Customers come to Grocery Outlet Bargain Market stores for quality groceries at a great value, so our store owners look to us to help keep costs down. Using R-448A kept contractor labor costs down because it’s a simple replacement. It offers excellent performance. Plus, it helped us not only meet California’s environmental regulations but also earn Gold-Level GreenChill Certification for the store.”



## Honeywell Solstice N40 Refrigerant (R-448A)

Solstice N40 is an HFO blend ideal for supermarket refrigeration retrofits and new systems.

- Performance equivalent to R-22
- Lower GWP than R-22 for long-term regulatory compliance
- Global warming potential (GWP) 68% lower than R-404A
- 5-16% lower energy consumption in medium-temperature refrigeration
- Nonflammable (ASHRAE A1) for safer, seamless integration
- Non-ozone-depleting
- No thermal expansion valve changes or adjustments, eliminating most retrofit costs

## The Right Choice For The Right Reasons

“Our business has a range of responsibilities,” notes Marotta. “We have a responsibility to help our independent store operators and their customers save money. We’re also fully committed to the responsibility we feel to sustainability. Store design and engineering play an important role in carrying out those responsibilities, and the use of R-448A is a huge part of that.”

Grocery Outlet Bargain Market is an extreme discount grocery store with more than 300 locations in the U.S., primarily in the west. As the name implies — and as customers appreciate — the stores provide quality food at an outstanding value. “Our customers want good food, and they want it affordable,” said Marotta. “We give them top-quality meats, produce, frozen and refrigerated foods, deli foods and more, and through an extreme dedication to efficiency, we’re able offer it all at a great price in a clean, pleasant environment.”

The new store in Los Angeles is roughly 18,000 square feet. Part of the store offers general merchandise, seasonal products, health and beauty items, and more. “The majority of the store is devoted to groceries, and that includes a large amount of refrigerated items,” explains Marotta. There are two 48-foot runs of frozen cases, 36 feet of deli space, 24 feet of case space for



produce, 12 feet for a salad bar, fresh meat bunkers, and small refrigerated units at the checkout area.

“We serve it all with five compressors, an air handler, and one roof condenser,” said Marotta. “The R-448A was our choice because we wanted to ‘go green’ while also keeping costs down, and most of all we wanted an easy, simple solution.”

### Simple Installation

Marotta studied several refrigerant choices before settling on Solstice N40. “We have environmental regulations to meet, so of course we looked at hydrocarbons. But they’re costly, about a 20 percent premium over conventional choices. Plus, a lot of techs don’t know how to work with them, so you’re paying for that learning curve. With the R-448A, or Solstice N40, we met our environmental needs at a better price, and the techs knew exactly how to use it since it’s a drop-in refrigerant. Plus, it’s nonflammable, and obviously safety is of prime importance.”

Grocery Outlet worked with Source Refrigeration, a CoolSys company, for the installation. “They were a great partner,” said Marotta. “We saw this store as an opportunity to put our best foot forward for customers who care about the environment, and Source Refrigeration helped make that happen. The installation of the refrigeration system and the R-448A was simple and straightforward. You always worry, but this was seamless. There were no issues and no time lost to equipment changes or a learning curve. It was a great experience.”

The store not only uses Solstice N40 in the refrigeration system, but also in the HVAC system. “It just made sense since it’s so simple to use, performs well, and checks the safety and environmental compliance boxes,” said Marotta. “There really weren’t any reasons not to do it.”

### Satisfying Results

Nothing pleases Marotta like an efficient design, and the use of Solstice N40 refrigerant has delivered excellent results for the store. “The system is running beautifully. It’s super reliable. There just haven’t been any hiccups at all.”

“The R-448A refrigerant is a great for efficiency. Saving energy and maintenance costs is important to every owner. Most of our independent operators are family businesses, so they care about their communities. The GreenChill Certification we received shows a local commitment to sustainability.”

## Gold-Level GreenChill Certification Criteria

- Only use refrigerants with zero ozone-depleting potential
- Only use refrigerants that have been found acceptable by EPA’s Significant New Alternatives Policy Program (SNAP) for use in retail food refrigeration end-uses
- Achieve an average HFC refrigerant charge equal to or less than 1.25 lbs. of refrigerant per MBTU/hr. total evaporator heat load
- Achieve a store-wide annual HFC refrigerant emissions rate of 15% or less
- All newly constructed stores must be leak tested at installation according to the standards in GreenChill’s Installation Leak Tightness Testing Guidelines

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**For More Information:**

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