

# SOLSTICE® 454B (R-454B)

Solstice® 454B (R-454B) is a non-ozone-depleting, zeotropic HFO blend refrigerant designed as a low global warming potential (GWP) solution for air conditioning and reversible heating systems, especially in residential and light commercial applications.

For HVAC contractors and building owners planning new comfort cooling or heating systems, Solstice 454B has properties very similar to R-410A. It provides a 78% lower GWP of 467 with a close capacity match that delivers similar capacity and efficiency. The near-azeotropic behavior of Solstice 454B ensures minimal performance drift during operation.

Solstice 454B has a higher critical temperature (172.6° F and 77°C) that provides excellent performance in high ambient conditions. It also delivers a broader operating envelope in low evaporating temperatures. Compatible with synthetic polyolester (POE) oils used in HVAC systems, R-454B has a low temperature glide. It is ASHRAE classified as an A2L refrigerant and is intended for use in equipment designed for A2L refrigerant requirements.

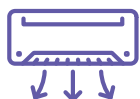


| CATEGORY                     | SOLSTICE® 454B  |
|------------------------------|-----------------|
| Performance Function         | New equipment   |
| Refrigerant Class            | HFO blend       |
| Refrigerant Type             | Zeotropic blend |
| Global Warming Potential     | 466             |
| Ozone Depletion Potential    | 0               |
| ASHRAE Safety Classification | A2L             |
| ASHRAE Number                | R-454B          |
| Replaces                     | R-410A          |

## WHY CHOOSE SOLSTICE 454B?

Solstice® 454B (R-454B) refrigerant minimizes capital expenditures and streamlines conversion to a low GWP refrigerant with minimal changes from a R-410A design. With its high critical temperature and broader operating envelope in low evaporating temperatures, Solstice® 454B (R-454B) refrigerant outperforms other refrigerant alternatives in normal and high ambient conditions in a variety of applications.

## APPLICATIONS



Residential air conditioning



Light commercial air conditioning



Heat pumps



Commercial packaged systems



Direct expansion (DX) chillers



Data center room cooling

### BENEFITS

- **Support R-410A system transition planning:** With a close capacity match to R-410A, Solstice 454B helps support the transition to new equipment platforms with a more familiar performance story with a 78% lower GWP option.
- **Maintain strong comfort cooling and heating performance:** Solstice 454B is designed to deliver improved efficiency and matching capacity to R-410A, helping support reliable performance across comfort cooling and reversible heating applications. Because Solstice 454B is optimized for R-410A replacement, it helps support new system designs with minimal changes compared with broader refrigerant alternatives. Similar discharge temperature to R-410A, low temperature glide, and miscibility with POE lubricants help make Solstice 454B a more practical option for HVAC equipment planning and service conversations.
- **HVAC platforms:** High critical temperature and broader operating envelope in low evaporating temperatures, Solstice® 454B outperforms other refrigerant alternatives in normal and high ambient conditions in a variety of applications, simplifying training, inventory planning, and customer conversations.

| PACKAGE TYPE | PRODUCT PACKAGING SIZE | SKU      |
|--------------|------------------------|----------|
| Jug          | 20 lb / 9 kg           | 10671095 |
| Cylinder     | 100 lb / 45.4 kg       | 10669597 |
| Half Ton     | 800 lb / 363 kg        | 10671458 |
| Ton          | 1300 lb / 589.7 kg     | 10671457 |



**Solstice Advanced Materials Inc.**  
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