

Honeywell Solstice™ Liquid Blowing Agent



Finely-Tuned Performance

Honeywell

Fourth Generation Liquid Blowing Agent for the 21st Century.

The first blowing agents were invented in the 1940s, and Honeywell has been at the forefront of every major improvement in blowing agent technology since then. As the world seeks new, lower-global-warming-potential solutions, Honeywell delivers again, with its Solstice™ brand of low-global-warming-potential blowing agents, refrigerants and aerosols.

Honeywell's new Solstice™ Liquid Blowing Agent harmonizes across the four dimensions that are most important to blowing agent customers:

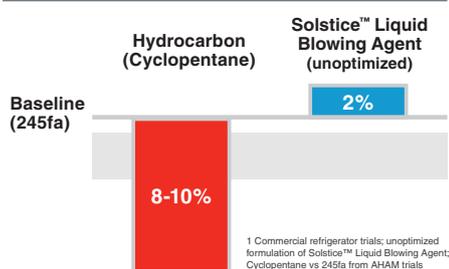
Performance | Cost Effectiveness | Environmental Impact | Safety

Performance

Refrigerator Insulation

- Up to 10-12% better than cyclopentane; 2% better than HFC-245fa (unoptimized). We expect even more as formulations are fine-tuned.
- Better energy efficiency performance at low temperatures

% Energy Efficiency Improvement (refrigerator power consumption¹)



Spray Foam Insulation

- Spray-applied foam insulation (regardless of which blowing agent technology is used) can make homes 20-40% more energy-efficient than those using traditional insulation materials such as fiberglass or mineral wool.
- Honeywell Solstice Liquid Blowing Agent has been demonstrated to increase the thermal insulation value of highly energy-efficient spray-applied insulation foams by an additional 5%.

The energy efficiency benefits of Solstice Liquid Blowing Agent, combined with its low-global-warming potential and safety in use, make it the right choice as a replacement for hydrocarbons, HCFC-141b, HFC-365mfc and HFC-245fa for use as a foam insulation blowing agent.



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Cost Effectiveness

Honeywell Solstice Liquid Blowing Agent will be more cost-effective than other solutions to meet ever-increasing energy standards globally.

- A near drop-in replacement for liquid HCFC, HFC, hydrocarbons and other non-fluorocarbon blowing agents
- Does not require costly hydrocarbon storage and handling or risk mitigation equipment.

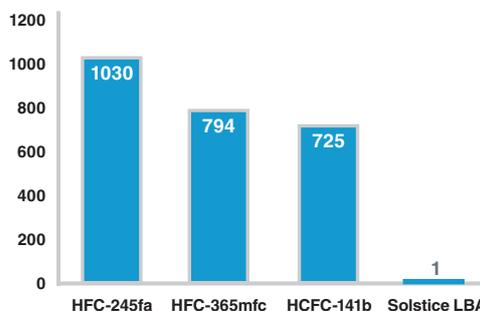
Environmental Impact

Honeywell Solstice Liquid Blowing Agent is EPA SNAP-listed. It is a promising replacement for foam insulation blowing agents currently in use, with the potential to make significant contributions to reductions in global warming.

When substituted for HCFC-141b, HFC-245fa and HFC-365mfc, the use of Solstice Liquid Blowing Agent can yield substantial improvements in the environmental impact of foam blowing agents right away. With a global warming potential (GWP) equal to 1, its widespread adoption could save about 60 million metric tons per year of CO₂ equivalent, comparable to eliminating carbon dioxide emissions from more than 11.8 million cars every year.

(Source: GHG Equivalencies Calculator: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>)

Honeywell Solstice Liquid Blowing Agent has a GWP equal to 1



Safety

- Solstice LBA is non-flammable, unlike hydrocarbon alternatives, which require explosion-proof handling.

Regulatory

Honeywell Solstice LBA is:

- EPA SNAP-listed
- Listed on the TSCA inventory
- VOC-exempt