



“Solstice® Propellant has enabled our company to introduce PurCheck®, a smoke detector test spray for homes and commercial buildings that offers the lowest global warming potential and nonflammability¹ profile of any test spray available today.”

– Tom Barakat, Vice President of Business Development and General Manager, HSI Fire & Safety Group LLC

Preparing for a Low GWP Future

Solstice® Propellant Helps HSI Expand Product Mix



THE CHALLENGE

To meet current and future customer needs, a leading supplier of smoke detector aerosol testers wanted to introduce a new product with a lower global warming potential (GWP) than HFC-134a, and with the benefit of nonflammability too.

THE SOLUTION

The company tested and ultimately selected Honeywell’s Solstice® Propellant (HFO-1234ze[E]). Solstice Propellant has an ultra-low GWP of less than 1, is non-ozone-depleting, is nonflammable¹, and meets critical field performance requirements. It’s the only propellant available today that can offer this combination of properties.

Pursuing an Opportunity

As a leading supplier and developer of smoke, carbon monoxide and heat detector testers and kits, HSI Fire & Safety Group LLC is based in Elk Grove Village, Illinois. For more than 30 years, fire and safety professionals worldwide have been using its products, which meet all global fire alarm codes and standards for home and commercial applications.

HSI is sharply focused on two key market concerns: HFC phase-outs for aerosol propellants and the growing trend to improve product safety. To stay ahead of the curve, it is proactively developing a global suite of next-generation products that not only feature an ultra-low GWP, but also nonflammability.

HSI’s first step was to expand its smoke detector test spray portfolio. After investigating various propellants, HSI chose Solstice® Propellant from Honeywell due to its





ultra-low GWP of less than 1² and nonflammable¹ status, plus its ability to meet field performance requirements. It offers all the performance benefits of HFCs, but with favorable environmental and safety properties.

As a result, in addition to its industry leading SmokeCheck[®] test spray, HSI now offers PurCheck[®] too – a more sustainable alternative to high GWP blends.

Delivering Customer Value

For many of HSI's customers, SmokeCheck will continue to be their product of choice, despite its flammability.

PurCheck, however, is filled with Solstice Propellant which, as mentioned, has an ultra-low GWP of less than 1 and is nonflammable. It appeals to the early adopter of new technologies in the United States who desires those properties. It also appeals to customers in Europe who need to convert away from smoke detector testers filled with HFC-134a, which has a very high GWP 1300². Such customers are facing pressure under the Paris Agreement of December 2015 to convert to alternatives that reduce climate change and fall within the maximum limit of 150 GWP.

“To test smoke detectors, much of Europe is currently using costly electronic testers and expensive aerosol cans filled with HFC-134a, which far exceeds the 150 GWP limit,” Barakat said. “That’s three strikes against your bottom line when you are trying to reduce costs while addressing HFC concerns. With PurCheck, the return on investment is much more attractive and sustainable.”



Locking In Solstice® Propellant

Prior to launch, HSI conducted internal testing using Solstice Propellant as a filler, and also sent the filled product to Underwriters Laboratories. The product passed all criteria, was shown to perform very well in the field, and is helping HSI deliver the following product profile:

- Excellent product performance; effective after 300-400 tests per can
- UL and ULC Listed
- 100% EPA compliant with no HFCs or CFCs
- Meets all NFPA 72 and International Fire Codes
- Nonflammable
- Safe on sensors

Because Solstice Propellant is compatible with most plastics, elastomers and metals, no changes in aerosol cans or parts were needed.

Line filling with Solstice Propellant was also considered easy with no special challenges, as it is compatible with most existing filling equipment. While HSI is currently filling from cylinders due to smaller new-product volumes, it expects to gain efficiencies when demand increases to allow filling from bulk tanks. Because HSI uses experienced contract fillers, the conversion to Solstice Propellant took minimal effort.



Looking Ahead

According to Barakat, Solstice Propellant puts HSI in a unique position to expand its product mix in ways that offer important environmental and safety options to customers.

“We’re happy to add PurCheck to our product line and are looking forward to future collaboration with Honeywell to help us drive market success around the world,” he said, adding that HSI plans to expand other fire and safety product lines with Solstice Propellant, as well. “It’s a unique product that is already getting attention.”

For more information about HSI, see www.hsifiresafety.com.

¹ Solstice Propellant is a UN class 2.2 nonflammable liquefied gas. It is designated as nonflammable by U.S. DOT, GHS, IATA and IMDG standards, and by ASTM E-681, ISO 10156 and EU-A11 methods.

² The Fifth Assessment Report (AR5) of the United Nations Intergovernmental Panel on Climate Change (IPCC).

Contact Honeywell to Learn More

To learn more about the benefits of Solstice Propellant, call Honeywell at 1-800-631-8138 or visit

honeywell-solstice-propellants.com

Although Honeywell International Inc. believes that the information contained herein is accurate and reliable, it is presented without guarantee or responsibility of any kind and does not constitute any representation or warranty of Honeywell International Inc., either expressed or implied. A number of factors may affect the performance of any products used in conjunction with user's materials, such as other raw materials, application, formulation, environmental factors and manufacturing conditions among others, all of which must be taken into account by the user in producing or using the products. The user should not assume that all necessary data for the proper evaluation of these products are contained herein. Information provided herein does not relieve the user from the responsibility of carrying out its own tests and experiments, and the user assumes all risks and liabilities (including, but not limited to, risks relating to results, patent infringement, regulatory compliance and health, safety and environment) related to the use of the products and/or information contained herein.

Honeywell Fluorine Products

115 Tabor Road
Morris Plains, NJ 07950
1-800-631-8138



Solstice is a registered trademark of Honeywell International Inc.

September 2016 Printed in U.S.A. Version 9
©2016 Honeywell International Inc. All rights reserved

Honeywell