Honeywell Solstice® Gas Blowing Agent (GBA) is among Honeywell’s latest advances in blowing agent technology and is ideal for residential and commercial insulation. The blowing agent causes the polystyrene foam to expand, creating highly energy-efficient closed-cell insulation. The choice of blowing agent directly impacts the performance of the finished product and operating costs of the structure. Honeywell’s technical team can work with you to optimize the use of Solstice GBA in your formulation.

**Performance**

Solstice GBA increases the insulation value of XPS foam insulation boards. This can translate into a thinner panel required to achieve the desired performance, or higher thermal insulation value with the same thickness.

- The long term insulation performance of XPS foam insulation boards made with Solstice GBA is 7% better than HFC-134a and 26% better than CO₂.
- Solstice GBA has an ultra-low global warming potential of less than 1, even lower than CO₂.

**Cost Effectiveness**

Solstice GBA is designed to be a straight-forward, cost-effective solution.

- Near drop-in replacement for gaseous blowing agent technologies.
- Limited investment in plant equipment necessary to meet flammability safety standards.

**Environmental Impact**

The use of Solstice GBA can yield substantial improvements in the environmental impact of foam blowing agents right away. With a global warming potential (GWP) of less than 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.htm)

**Safety**

Solstice GBA is nonflammable, unlike other gaseous blowing agents or hydrocarbon alternatives, which require explosion-proof handling.

**Regulatory**

Honeywell Solstice GBA is:

- EPA SNAP-listed
- Listed on the TSCA inventory
- VOC-exempt (U.S. EPA)

**Environmental and Safety Properties**

<table>
<thead>
<tr>
<th></th>
<th>Solstice GBA</th>
<th>134a</th>
<th>CO₂</th>
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<tbody>
<tr>
<td>Global Warming Potential</td>
<td>&lt;1</td>
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<td>1</td>
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<tr>
<td>VOC</td>
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<td>No</td>
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<tr>
<td>Flammable</td>
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<td>No</td>
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<tr>
<td>Exposure Limit, ppm</td>
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<td>5000</td>
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<td>Molecular Weight, g/mol</td>
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<td>Boiling point, °F/°C</td>
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<td>-15.1/-26.2</td>
<td>70.6/-57.0</td>
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