



**REFRESH
YOUR
FORMULATION
WITH
SOLSTICE[®]
INGREDIENTS**

Honeywell

Solstice® ingredients offer exciting possibilities for formulators. Solstice® Propellant (HFO-1234ze(E)) is a breakthrough for aerosol-based products. Solstice® Enhance (HFO-1233zd(E)) is a multi-functional solvent and carrier fluid.



FAST DRY

- **Fast evaporation:** Spray small-sized droplets for quick dry time, leaving behind pure product/active.
- **Low ethanol:** Less ethanol in the formulation makes the product less drying to skin and hair.



COOLING

- **Absorbs heat from skin:** High heat of vaporization provides range of cooling skin sensations.



LUXURIOUS TEXTURES

- **Excellent foaming and unique sensations:** Create a luxurious texture in your next foam formulation with high gloss, creamy texture, and easy spreadability



CRACKLING

- **Interactive action:** Crackling effect enables audio and visual cues to create a strong reason to believe in a variety of skin care and hair care formulations.

VIEW OUR EXAMPLE FORMULATION SHEETS

Fast Dry

- Nonflammable Texturizing Spray

Luxurious Textures

- Gentle Sulfate Free Foam Cleanser

Cooling

- Moisturizing Ice Cream

Crackling

- Cool Ultra Crackling Foam



ENVIRONMENTAL BENEFITS OF SOLSTICE INGREDIENTS

- Solstice® Propellant & Solstice Enhance are VOC-exempt (per U.S. EPA), unlike other propellants (e.g., Dimethyl ether, butane, propane, A46 or A70 blends) and volatile solvents (e.g., Ethanol, isopropyl alcohol).
- Solstice® Propellant is also VOC-exempt per California Air Resources Board (CARB).
- Both ingredients have a negligible contribution to smog formation.
- Both ingredients are nonflammable (per ASTM E-681 and EU A11). They are a proven alternative to flammable ingredients or they can be used to help reduce formulation flammability.
- Both ingredients are near-zero global warming potential (GWP).

EARTH-FRIENDLY FACT¹

If every can of hair spray sold in the US that currently uses 152a propellant were replaced with Solstice® Propellant, it would be equivalent to the amount of carbon dioxide emissions removed annually by approximately 6500 square miles of trees – an area larger than the size of Connecticut.

¹ Assumes a 10 oz. can with 40% Solstice Propellant vs. HFC-152a. Source using EPA website.

For more information visit

sustainability.honeywell.com

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