Solstice® EZ Flush

Technical Information

Introduction

Solstice® EZ Flush is the next-generation cleaning solution from Honeywell to replace HCFC-141b in straight flush (open flush) refrigeration and air conditioning circuits. Solstice EZ Flush is based on Honeywell's hydrofluoro-olefin solvent technologies for solvent degreasing shows an excellent combination of high solvency power with a variety of oils (e.g. mineral, synthetic, and PAG).

- Environmentally Preferable
 Ultra-low global warming potential (GWP)
 of 1 and non-ozone-depleting
- Cleaning Efficacy
 Saves time since it removes solvent and contaminants more quickly and easily from the circuit, and demonstrates a faster circuit purge / vacuum post-flushing
- Safe to Use Non-flammable¹
- Trusted Supply
 Ready-to-use alternative to HCFC-141b designed and made in the U.S. by Honeywell, a trusted, global supplier

Applications

Solstice EZ Flush is used to flush and clean the components of air conditioning and refrigeration circuits, including, but not limited to:

- Transportation A/C and refrigeration, such as cars, trucks, buses, and trains
- Aerospace, such as airplanes and helicopters
- Residential and commercial A/C applications
- Commercial refrigeration systems
- Process chillers

Cleaning Effectiveness

Solstice EZ Flush is an effective cleaning solvent for many common oils, lubricants, solids, and acids that build up in the circuit including, but not limited to:

- Mineral oils
- Heavy grease
- Refrigerant oils
- · Cutting oils
- Vacuum oils
- Silicone oils
- Fluorinated oils
- Silicone grease

As with any product, Honeywell recommends testing effectiveness in your application prior to use.



Cleaning Performance

	Typical Refrigerant Lubricants		
	Mineral Oil	POE	PAG
Solstice EZ Flush	Very Good	Very Good	Very Good
Nitrogen	Poor	Poor	Poor
R-22	Good	Good	Good
HCFC-141b	Very Good	Very Good	Very Good

Physical Properties

Chemical Family	Hydrofluoroolefin (HFO)
Appearance	Clear and Colorless
Boiling Point	19°C/66°F
Liquid Density @ 20°C	1.27 g/mL
Purity	98 wt % +

Safety and Environmental Information

Solstice® EZ Flush is supplied in pressurized cylinders. As with any solvent cleaning process, always exercise caution when handling the cylinders, Avoid direct inhalation or contact with the contents. Ensure the safety of operators and people nearby. Refer to the EZ Flush Safety Data Sheet (SDS) for complete information.

Solstice EZ Flush has an ultra-low GWP of 1 and is non-ozone-depleting. It also has a very low maximum incremental reactivity (MIR), which means that the material will have a low impact on tropospheric ozone, or smog, creation. It is safe to vent EZ Flush directly to atmosphere in accordance with regional and local regulations.

Physical and Environmental Properties

Vapor Flame Limits ¹	None
Flash Point	None
LFL / UFL (Vol %)	None
VOC (U.S. EPA)	Exempt
ODP	Non-ODP ^{2,3}
GWP, Rev. 5th IPCC, 100 Year	1
WEEL ⁴	800 ppm

Materials Compatibility

Solstice EZ Flush is compatible with stainless steel, cold rolled steel, galvanized steel, copper, iron, and aluminum, with or without excess water.

Pressurization and Usage

Compressed nitrogen can be used to dry the circuit after flushing with Solstice EZ Flush if desired. Avoid using compressed air.

IMPORTANT: Solstice EZ Flush is engineered for single-use application only. It is not compatible with Honeywell Ekoflush™ machine-driven flush units.

Storage and Disposal

Refer to the SDS before using the product. Dispose of empty cylinders in accordance with all federal, state, local and environmental laws and regulations. Avoid storing filled cylinders above 55°C for prolonged periods of time.

Packages

Solstice EZ Flush is available in 10-kg cylinders, pressurized with nitrogen between 6-8 bar, for an easy introduction and evacuation of the solvent through the circuit.



¹Solstice PF is a UN class 2.2 nonflammable liquefied gas. It is designated as nonflammable by ASTM E-681.

²M.P.S. Andersen et al. / Journal of Photochemistry and Photobiology A: Chemistry 199 (2008) 92–97.

³K. O. Patten and D. J. Wuebbles / Atmos. Chem. Phys., 10, 10867–10874, 2010.

⁴Workplace Environmental Exposure Level (8-hour time-weighted average) per the Occupational Alliance for Risk Science (OARS).

For more information:

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