Solstice® Refrigerants

Solstice® yf (R-1234yf)

Solstice

Solstice® yf: High-Capacity, Ultra-Low GWP Refrigerant for Automotive Applications

R-1234yf is a pure HFO refrigerant with low GWP and A2L safety classification, widely used in air conditioning systems for new vehicles. It is characterized by high cooling capacity and excellent energy efficiency. Although primarily applied in the automotive sector, it is also suitable for water chillers and medium-temperature industrial or commercial refrigeration systems.

Components / Chemical Name:	ASHRAE Code:
2,2,2,3-tretrafluoroprop-1-ene	R-1234yf

Technical specifications:

0	4	A2L	POE
ODP	GWP	Safety classification	Compatible lubricants

Temperature Range: High and Medium

Replacement:
R-134a in New Equipment

Type of replacement:
Retrofit

Applications:

- A/C Automotive Air Conditioning
- Chillers
- Commercial Refrigeration (Preservation)
- Industrial Refrigeration

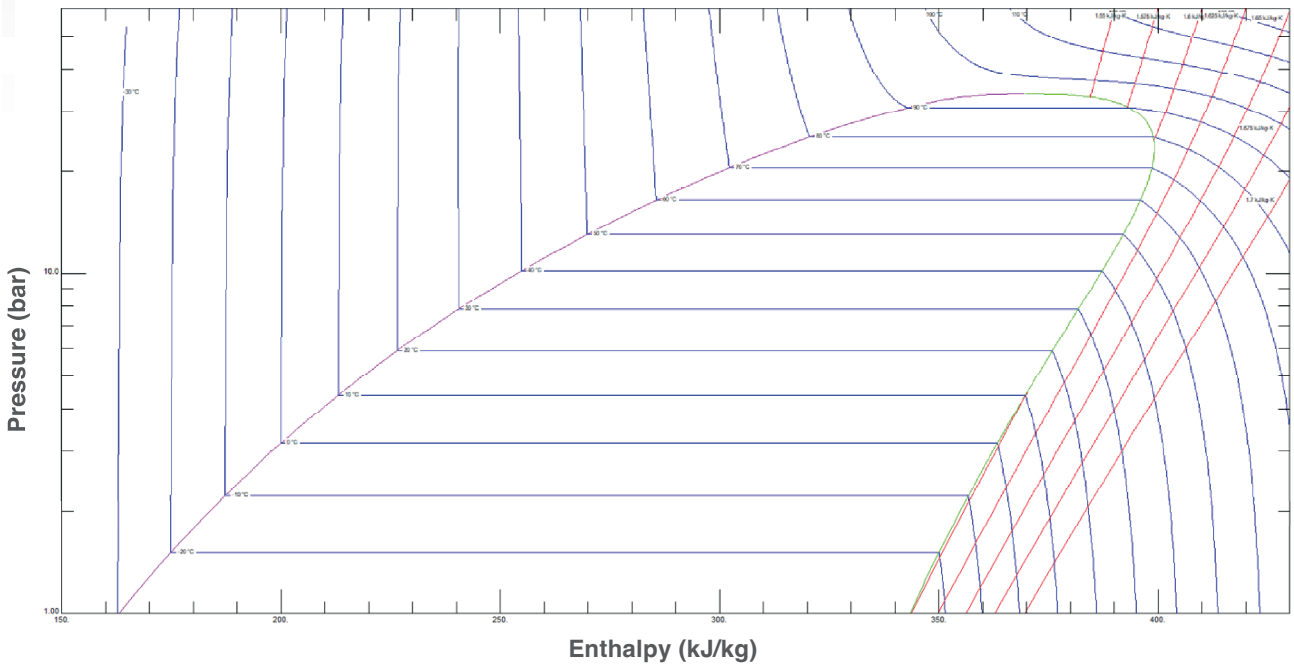
Packaging sizes for Solstice® yf:

- Cylinders
- Roll Drums
- ISO Tanks

Thermodinamic properties chart:

Temperature (°C)	Absolute pressure (bar)	Liquid density (kg/l)	Gas density (kg/l)	Liquid enthalpy (kJ/kg)	Gas enthalpy (kJ/kg)	Liquid Entropy (kJ/kg K)	Gas Entropy (kJ/kg K)
-15	0,84	1,222	0,0105	181,0	353,4	0,929	1,597
-10	1,22	1,207	0,0126	187,3	356,7	0,953	1,597
-5	1,66	1,192	0,0149	193,6	360,0	0,976	1,597
0	2,16	1,176	0,0176	200,0	363,3	1,000	1,598
5	2,73	1,160	0,0207	206,5	366,5	1,023	1,599
10	3,38	1,144	0,0243	213,1	369,7	1,047	1,600
15	4,10	1,127	0,0283	219,8	372,8	1,070	1,601
20	4,92	1,110	0,0328	226,6	375,9	1,093	1,602
25	5,83	1,092	0,0379	233,5	378,9	1,116	1,604
30	6,84	1,073	0,0437	240,5	381,8	1,139	1,605
35	7,95	1,054	0,0503	247,6	384,5	1,162	1,606
40	9,18	1,034	0,0578	254,9	387,2	1,185	1,608
45	10,54	1,013	0,0662	262,3	389,7	1,208	1,609
50	12,02	0,990	0,0759	269,9	392,0	1,231	1,609
55	13,65	0,967	0,0870	277,6	394,1	1,255	1,610
60	15,42	0,941	0,0998	285,5	395,9	1,278	1,609

Pressure diagram chart:



Instructions:

Charge the system in the liquid phase. When using automotive gas charging equipment, refill the equipment tank when it reaches 50% capacity.

Normative:

GRIT (Gases Research Innovation & Technology) is committed to the continuous improvement of our inbuilt Quality Control, Environment and Major Accident Prevention Systems as well as close collaboration with our product and service providers. The scope of the system includes the packaging, commercialisation, storage and innovation of technical gases and the management of residual fluorinated gas and halogenated solvents.

All this work is reflected in our certificates ISO 9001 & ISO 14001. GRIT also meets AHRI 700 standard for new and recycled refrigerants.

More information:

If you want more information about our products, contact us.

EUROPE — GRIT, Gases Research Innovation & Technology

BARCELONA

Our plant:
P. I. "El Punsic", parcela 8.3,
08279 Avinyó, Barcelona. Spain.

Our office:
Avda. Diagonal 403, 6º 3ª
08008 Barcelona. Spain.

Phone: (+34) 932 721 400
E-mail: grit@grit.es
Website: www.gasesgrit.com

USA — Summit Refrigerants

HOUSTON

8541 East North Belt
Humble, Texas 77396

Phone: (+1) 281-540-2653
Toll-Free: (+1) 866-971-2653
Fax: (+1) 281-540-0385

DALLAS

2080 McDaniel Drive
Suite 200
Carrollton, Texas 75006

Phone: (+1) 469-458-3195
Fax: (+1) 469-458-3085

BATON ROUGE

10080 Industriplex Avenue
Gonzales, LA 70737

Phone: (+1) 225-744-2653
Fax: (+1) 225-677-6106