Solstice® Refrigerants

Solstice® 513A (R-513A)

Solstice

Solstice® 513A: Low-GWP, High-Safety Drop-In Replacement for R-134a.

R-513A is an A1 azeotropic HFC/HFO refrigerant, a direct substitute for R-134a with similar capacity and energy efficiency. As an azeotropic blend, it has no glide.

Components / Chemical Name:	ASHRAE Code:
N/A	R-513A

Technical specifications:

0	631	A1	POE
ODP	GWP	Safety classification	Compatible lubricants

Temperature Range: High and Medium

Replacement: R-134a in New and Existing Equipment

Type of replacement: Drop-in

Applications:

- Commercial Refrigeration (Preservation)
- Industrial Refrigeration
- Chillers
- A/C Automotive
- Refrigerated Transport

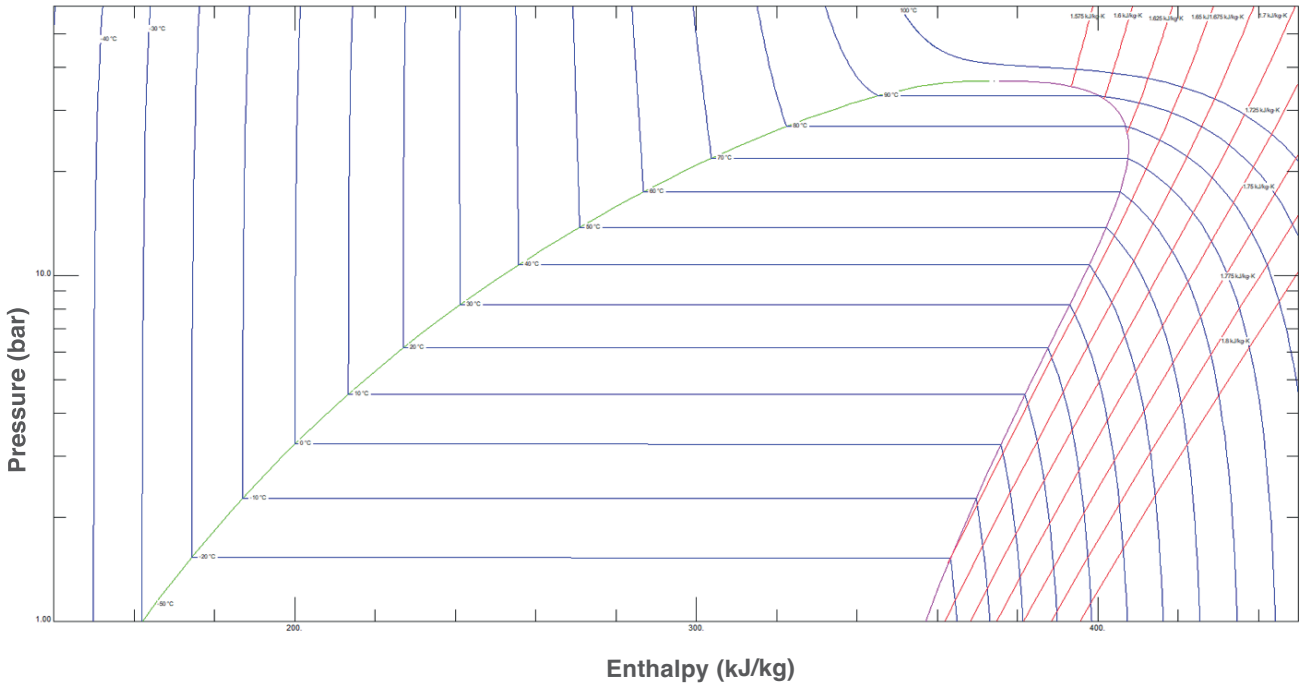
Packaging sizes for Solstice® 513A:

- Cylinders
- Roll Drums
- ISO Tanks

Thermodinamic properties chart:

Temperature (ºC)	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	0,87	1,269	0,0102	180,6	365,8	0,927	1,645
-10	1,27	1,254	0,0122	187,0	369,0	0,952	1,643
-5	1,72	1,238	0,0146	193,5	372,3	0,976	1,643
0	2,25	1,222	0,0173	200,0	375,5	1,000	1,642
5	2,85	1,205	0,0204	206,6	378,6	1,024	1,642
10	3,53	1,188	0,0239	213,3	381,6	1,048	1,642
15	4,30	1,171	0,0279	220,1	384,6	1,071	1,642
20	5,17	1,153	0,0325	227,0	387,5	1,095	1,642
25	6,13	1,134	0,0376	234,0	390,3	1,118	1,642
30	7,21	1,115	0,0435	241,1	393,0	1,141	1,642
35	8,41	1,095	0,0501	248,4	395,6	1,165	1,642
40	9,73	1,074	0,0577	255,7	398,0	1,188	1,642
45	11,18	1,052	0,0663	263,2	400,3	1,211	1,642
50	12,78	1,029	0,0761	270,9	402,3	1,235	1,641
55	14,52	1,004	0,0874	278,8	404,2	1,258	1,641
60	16,44	0,977	0,1004	286,8	405,7	1,282	1,639

Pressure diagram chart:



Instructions:

Charge the system in liquid phase. When using an automotive gas charging unit, refill the unit's reservoir when it reaches 50% of its 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.

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