Fluorinated Refrigerants

R-152a

R-152a: A2 Substitute for R-134a

R-152a (difluoroethane) it is an A2 pure HFC refrigerant with wide versatility of application at high and medium temperatures and by its large enthalpy jump that provides it with a remarkable cooling capacity. It can be used as a low-GWP substitute for R-134a but always following the guidelines of the Safety Regulation in Refrigeration Installations on the use of A2 refrigerants.

IUPAC Name:	ASHRAE Name:
1,1 - difluoroethane	R-152a

Technical specifications:

0	124	A2	POE
ODP	GWP	Safety classification	Compatible lubricants

Temperature Range: High and Medium

Replacement:
R-134a in New Equipment

Type of replacement:
Replacement (New Equipment)

Applications:

- Industrial Refrigeration
- Chillers

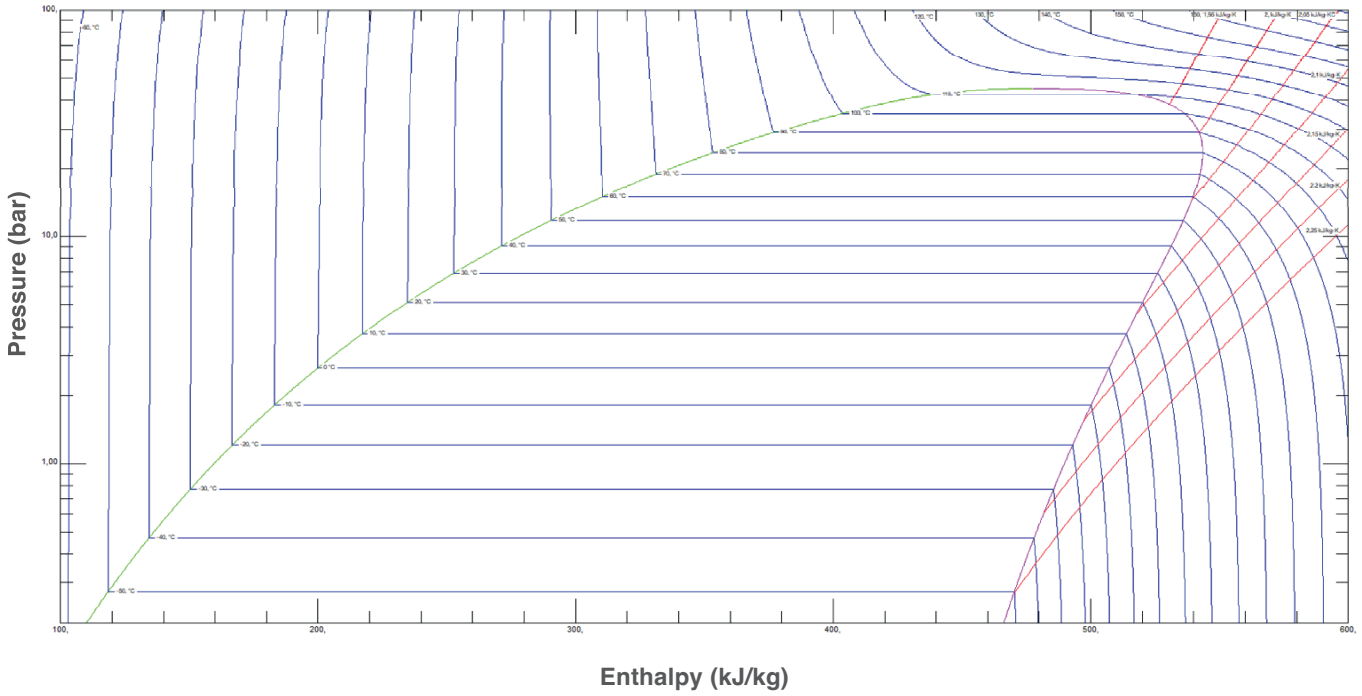
Packaging sizes for R-152a:

- 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)
-50	0,27424	1,0637	0,00099362	118,62	470,4
-45	0,36233	1,0538	0,0012889	126,48	474,21
-40	0,47211	1,0438	0,0016506	134,4	478,02
-35	0,60727	1,0337	0,0020889	142,37	481,79
-30	0,77183	1,0235	0,0026149	150,39	485,55
-25	0,97012	1,0132	0,0032407	158,48	489,26
-20	1,2068	1,0027	0,0039791	166,64	492,94
-15	1,4868	0,99209	0,0048443	174,86	496,57
-10	1,8152	0,98128	0,0058515	183,16	500,15
-5	2,1977	0,9703	0,007017	191,54	503,66
0	2,6399	0,95911	0,0083588	200	507,11
5	3,1478	0,94771	0,0098964	208,55	510,49
10	3,7276	0,93607	0,011651	217,19	513,78
15	4,3858	0,92417	0,013647	225,93	516,99
20	5,129	0,91197	0,015909	234,77	520,09
25	5,9641	0,89947	0,018469	243,73	523,09
30	6,8982	0,88661	0,021357	252,8	525,96
35	7,9385	0,87336	0,024613	262,01	528,7
40	9,0926	0,85967	0,02828	271,35	531,28
45	10,368	0,8455	0,032408	280,84	533,7
50	11,774	0,83078	0,037057	290,5	535,93

Pressure diagram chart:



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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