Natural Refrigerants

R-600a (Isobutane)

R-600a: Natural refrigerant for high- and medium-temperature applications.

R-600a is a hydrocarbon refrigerant with low environmental impact in terms of both ozone layer protection and global warming potential, and it is classified as an A3 safety group refrigerant. It is primarily used in food preservation equipment.

Chemical name:	ASHRAE Name:
Isobutane/Methyl Propane R-600a CH(CH3)2CH3	R-600a

Technical specifications:

0	3	A3	Mineral, Alkylbenzene and POE
ODP	GWP	Safety classification	Compatible lubricants

Boiling point: -11.8°C.

Temperature range: High and Medium.

Replacement: HFC refrigerants in New Equipment.

Applications:

- Equipment for Food Conservation
- Commercial Refrigeration

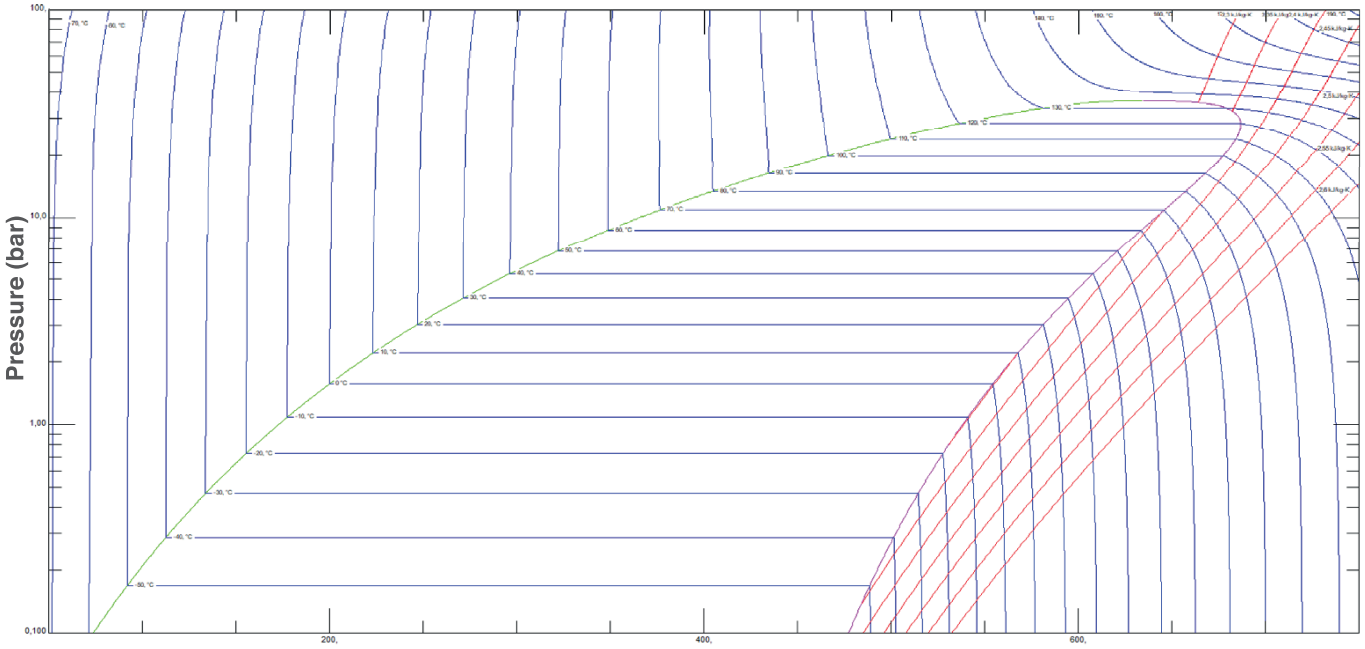
Packaging sizes for R-600a (Isobutane):

- 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 K)	Gas enthalpy (kJ/kg K)
-50	0,16797	0,63444	0,00053214	91,764	488,49
-45	0,22107	0,6293	0,00068678	102,09	494,89
-40	0,28702	0,62412	0,00087513	112,51	501,35
-35	0,36797	0,61889	0,0011021	123,04	507,85
-30	0,46622	0,61361	0,0013729	133,68	514,4
-25	0,58427	0,60827	0,0016931	144,43	520,99
-20	0,72477	0,60288	0,0020687	155,3	527,61
-15	0,89053	0,59741	0,002506	166,29	534,26
-10	1,0845	0,59188	0,0030117	177,4	540,93
-5	1,3098	0,58627	0,0035928	188,63	547,63
0	1,5696	0,58058	0,004257	200	554,34
5	1,8672	0,5748	0,0050121	211,5	561,06
10	2,2061	0,56892	0,005867	223,15	567,78
15	2,5899	0,56295	0,0068308	234,94	574,5
20	3,0222	0,55686	0,0079134	246,88	581,21
25	3,5067	0,55065	0,0091258	258,98	587,9
30	4,0472	0,54431	0,01048	271,24	594,57
35	4,6477	0,53783	0,011988	283,67	601,21
40	5,3121	0,53119	0,013666	296,28	607,8
45	6,0444	0,52437	0,015529	309,07	614,34
50	6,849	0,51737	0,017595	322,06	620,82

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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