Natural Refrigerants

R-600 (n-Butane)

R-600 (n-Butane): Natural refrigerant for positive temperature applications.

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

Chemical name:	ASHRAE Name:
n-Butane R-600 $CH_3CH_2CH_2CH_3$	R-600

Technical specifications:

0	4	A3	Mineral, Alkylbenzene and POE
ODP	GWP	Safety classification	Compatible lubricants

Boiling point: -0.5°C.

Temperature range: Medium (5°C).

Replacement: HFC refrigerants in New Equipment.

Applications:

- Equipment for Food Conservation
- Commercial Refrigeration

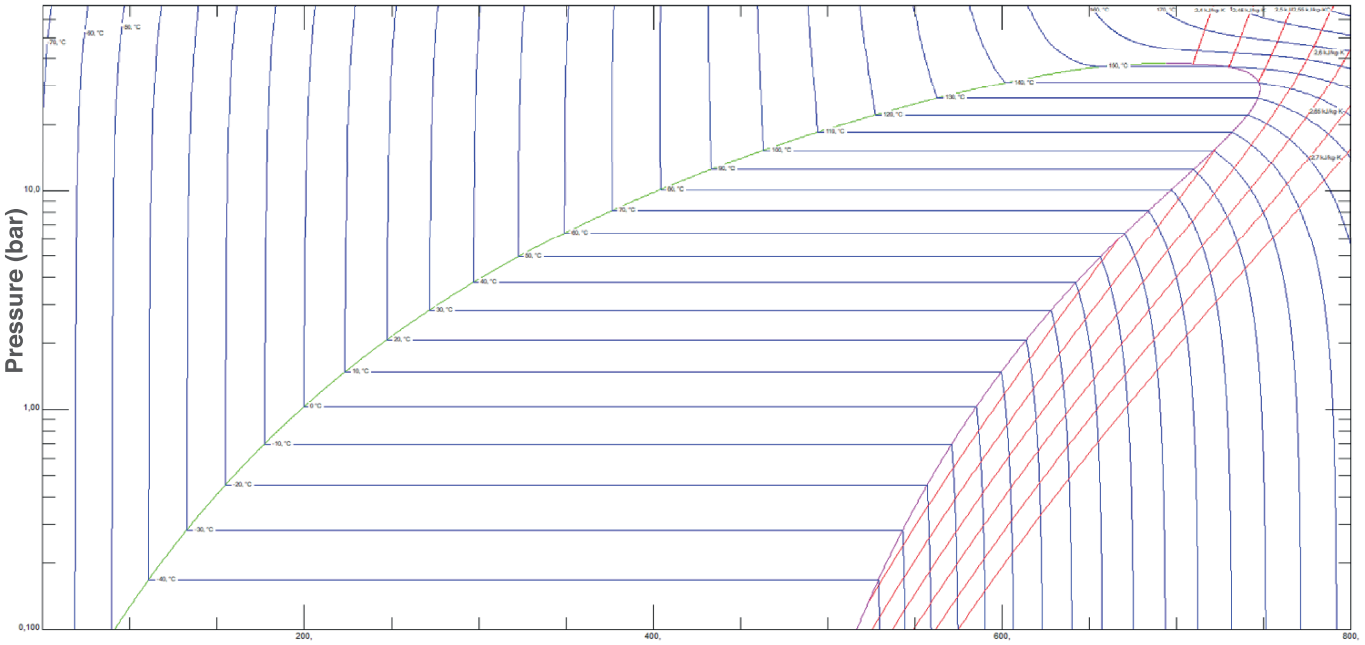
Packaging sizes for R-600 (n-Butane):

- Cylinders
- Roll Drums

Thermodinamic properties chart:

Temperature (ºC)	Absolute pressure (bar)	Liquid density (kg/l)	Gas density (kg/l)	Liquid enthalpy (kJ/kg K)	Gas enthalpy (kJ/kg K)
-50	0,094668	0,65171	0,00029877	89,424	515,56
-45	0,127	0,64681	0,00039275	100,07	522,35
-40	0,16791	0,64188	0,00050921	110,8	529,19
-35	0,21902	0,63691	0,00065184	121,62	536,08
-30	0,2821	0,63189	0,00082463	132,52	543,01
-25	0,35909	0,62684	0,0010319	143,51	549,98
-20	0,45213	0,62173	0,0012782	154,6	556,98
-15	0,56346	0,61657	0,0015684	165,79	564,02
-10	0,69552	0,61135	0,0019078	177,08	571,08
-5	0,85089	0,60608	0,002302	188,48	578,17
0	1,0323	0,60073	0,0027567	200	585,27
5	1,2425	0,59532	0,0032783	211,64	592,39
10	1,4845	0,58983	0,0038734	223,4	599,53
15	1,7615	0,58425	0,004549	235,28	606,66
20	2,0765	0,57859	0,0053126	247,3	613,8
25	2,4329	0,57283	0,0061722	259,46	620,94
30	2,8341	0,56698	0,0071366	271,76	628,06
35	3,2836	0,56101	0,008215	284,21	635,17
40	3,7848	0,55492	0,0094176	296,82	642,25
45	4,3416	0,5487	0,010755	309,58	649,31
50	4,9575	0,54234	0,012241	322,51	656,32

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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