Natural Refrigerants

R-290 (Propane)

R-290: Natural refrigerant for high cooling capacity applications.

R-290 is a hydrocarbon refrigerant with low environmental impact in terms of both ozone layer protection and greenhouse effect and is classified as a safety group A3 refrigerant. It is mainly used in portable air conditioning equipment, as well as freezing or conservation equipment.

Nombre químico:	ASHRAE Name:
Propane R-290 CH3CH2CH3	R-290

Technical specifications:

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

Boiling point:-42.1°C.

Temperature range: High, medium, and low.

Replacement: HFC refrigerants in new equipment.

Applications:

- A/C Air Conditioning in Portable Equipment
- Industrial Refrigeration
- Commercial Refrigeration
- Flooded Systems

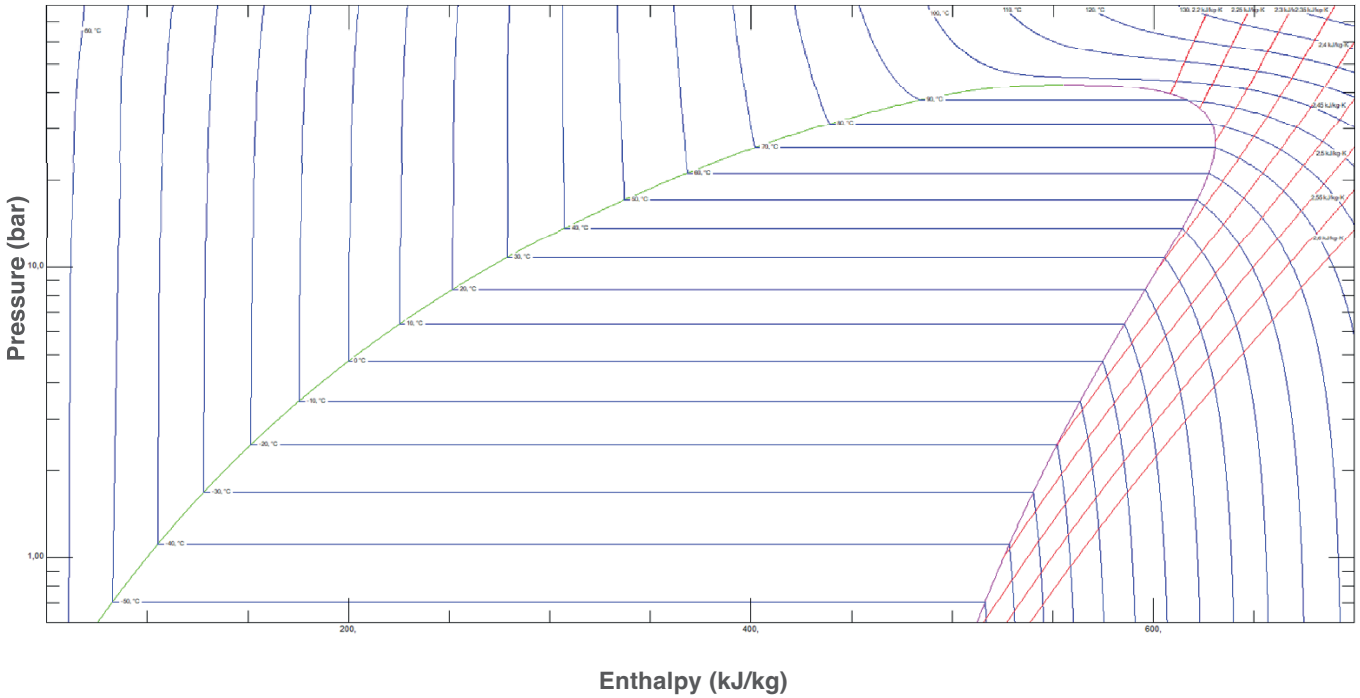
Packaging sizes for R-290 (Propane):

- 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 K)	Gas enthalpy (kJ/kg K)
-65	0,32527	0,60657	0,00084261	49,987	498,42
-60	0,42693	0,60108	0,001084	60,811	504,44
-55	0,55249	0,59552	0,0013764	71,731	510,46
-50	0,70568	0,5899	0,001727	82,753	516,48
-45	0,89051	0,5842	0,002143	93,881	522,49
-40	1,1112	0,57843	0,0026326	105,12	528,48
-35	1,3723	0,57258	0,0032042	116,49	534,45
-30	1,6783	0,56664	0,0038669	127,97	540,38
-25	2,0343	0,5606	0,0046302	139,6	546,28
-20	2,4452	0,55445	0,0055046	151,36	552,13
-15	2,9162	0,54819	0,0065012	163,28	557,93
-10	3,4528	0,5418	0,0076321	175,35	563,65
-5	4,0604	0,53527	0,0089103	187,59	569,3
0	4,7446	0,52859	0,010351	200	574,87
5	5,5112	0,52175	0,011969	212,6	580,33
10	6,366	0,51473	0,013783	225,4	585,67
15	7,3151	0,5075	0,015813	238,4	590,89
20	8,3646	0,50006	0,018082	251,64	595,95
25	9,5207	0,49236	0,020618	265,11	600,84
30	10,79	0,48439	0,023451	278,83	605,54
35	12,179	0,4761	0,026618	292,84	610,01
40	13,694	0,46746	0,030165	307,15	614,21
45	15,343	0,4584	0,034146	321,79	618,12
50	17,133	0,44887	0,03863	336,8	621,66

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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