Refrigerant - NU22

ENVIRO Refrigerants

NU22 (R417A)

NU22 is quickly becoming the most practically accepted solution to the phasing out challenge of HCFC-22. Availability ensured, this product has been designed as a blend consisting of three separate pure HFC/ HC refrigerants (R125/ 134a/ 600) all mass-produced by a variety of companies worldwide. With R22 similar operating characteristics, NU22 is ideal for new or existing R22 systems. A direct drop-in replacement, this product does not require any expensive system modifications, oil changes, product specific charging tools, instruments or retrofit equipment. Ideal for use in low, medium and high temperature systems, NU22 is the serviceman's single source when it comes to replacing all your R22 equipment applications. Used both as an OEM and service replacement, NU-22 will dramatically assist in the removal of HCFCs from the industry cycle.

57-NU22
Illustrated

NU-22

Features

- Compatible with all standard refrigerant oils.
- ASHRAE Designated.
- R22 like operating characteristics.
- Exceptionally Low TEWI.
  10% Energy Reduction Over R22.
- Zero Ozone Depletion.
- No Expensive Retrofits.
- Can Be Topped Off Repeatedly.
- ASHRAE Rated A1.
  Non Toxic - Non Flammable

Performance Specs:

Boiling point	-41.8°C (-43.2°F)
Critical temperature	90.5°C (194.9°F)
Critical pressure	559 psia
Density (saturated vapor) @ boiling point temp.	0.2447 lb/cf
Density liquid @ 25°C (77°F)	72.85 lb/cf
Heat of vaporization @ boiling point temp.	89.42 BTU/lb

Quality Specs:

Max. moisture	0.001%vol
Max. non-condensable	1.5%vol
High boiling impurities	0.01%vol

Safety Specs:

ASHRAE designation	R417A
ASHRAE safety classification	A1
Max recommended exposure limits	1000 ppm

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R22 Drop-in Direct Replacement

Part #	Description	Weight
57-NU22	R22 drop-in direct replacement.	*21.8kg (48lb)*

Temperature/ Pressures Chart

Temperature °F	Temperature °C	PSIG R22	Mean Average	Bubble Point PSIG Sat Liquid	Dew Point PSIG Sat Vapour
-40	-40	0.56			4.17
-36	-38	2.2	1.89	1.99	1.47
-30	-34	4.92	3.66	4.51	1.54
-26	-32	6.92	5.48	6.35	3.18
-20	-29	10.21	8.50	9.37	5.93
-16	-27	12.61	10.70	11.57	7.92
-10	-23	16.53	14.30	15.16	11.22
-6	-21	19.38	16.92	17.76	13.61
0	-18	24.03	21.19	22.00	17.55
6	-14	29.15	25.91	26.66	21.92
10	-12	32.84	29.30	30.01	25.05
16	-9	38.81	34.80	35.41	30.19
20	-7	43.09	38.76	39.32	33.86
26	-3	50.01	45.16	45.58	39.88
30	-1	54.98	51.97	56.76	44.16
36	2	62.89	57.08	57.25	51.10
40	4	68.56	62.33	62.37	56.05
46	8	77.62	70.75	70.57	64.05
50	10	84.06	76.74	76.40	69.77
56	13	94.3	87.38	88.95	78.88
60	16	116.3	99.11	95.67	85.36
66	19	113.2	105.11	106.40	95.72
70	21	121.4	112.81	113.96	103.06
76	24	134.5	125.09	125.99	114.78
80	27	143.6	133.69	134.46	123.00
86	30	158.2	147.36	147.88	136.00
90	32	168.4	157.02	157.30	145.37
96	35	184.6	172.23	172.17	159.93
100	38	195.9	182.93	182.60	170.30
106	41	213.8	199.75	199.05	186.40
110	43	226.4	211.62	210.56	197.91
116	47	246.1	230.01	228.65	215.29
120	49	260.0	242.93	241.29	227.49
126	52	281.7	263.36	261.14	247.25
130	54	296.9	277.49	274.97	260.61
136	58	320.7	299.82	296.64	282.12
140	60	337.4	315.48	311.73	297.32

Advantages

- ***The only HFC based R-22 replacement that is compatible with both synthetic and mineral oils (MO,AB,POE).***
- Proven compatibility with all standard equipment components and materials used in R-22 manufactured systems.
- Suitable for use in scroll, screw, rotary and reciprocating compressors.
- Closely matches R-22's operational pressures.
- Can be used in a wide range of traditional R-22 temperature applications, and beyond, while providing adequate oil return and system capacity.
- Avoids the need for unnecessary oil changes and only requires minor system adjustments or modifications.
- Zero ODP (ozone depletion potential) HFC refrigerant.
- Improved COP (coefficient of performance), NU-22 has a lower global warming impact compared to R22, as indicated by NU-22's TEWI (total equivalent warming impact) measurement.
- Non-toxic and non-flammable (ASHRAE classification A1).
- Compatible with all standard refrigerant oils, NU-22 can drastically reduce the level of waste oil handling and disposal normally associated with using refrigerants requiring an oil change.