



Código : 185614 Garr.11,34Kg-FREON 410A- Chermours -- R410A -

## Suva® 410A

R-410A (9100)

Reemplaza al R-22

### Qué decir

- Anteriormente conocido como Suva 9100
- El Suva 410A y el AZ-20 tienen el mismo N° ASHRAE
- Opción HFC a largo plazo para R-22 en desplazamiento positivo
- Refrigerante de mayor presión que el R-22, usar solo en equipo diseñado para R-410A
- Hasta 60% más capacidad comparado con el actual R-22
- Reemplaza también a R13B1 en algunos equipos de muy baja temperatura tales como secadores por congelamiento y algunas cámaras ambientales.



#### Tamaños de Cilindro:

29 lb. Descartable

100 lb. Retornable

### Descripción

- Número ASHRAE - R-410A
- Refrigerante HFC, no está planificado discontinuar su producción
- Clasificación de seguridad A1/A1 ASHRAE
- Aceptado por EPA SNAP
- Composición: HFC-32/HFC-125

### Aplicaciones

- Reemplaza al R-22 en equipos diseñados SOLO para R-410A.
- Reemplaza al R-13B1 en algunos equipos existentes de muy baja temperatura.

### Lubricante

- El poliol éster (POE) es el recomendado por los fabricantes de compresores para lograr el retorno de aceite requerido.

### Consejos Útiles

- Se puede reponer, fuga tras fuga; el rendimiento se mantendrá.
- Cargar con el cilindro en posición vertical para asegurar óptimo rendimiento (el tubo de inmersión asegura que el líquido es sacado del cilindro cuando este está en posición vertical).

### Referencia Bibliográfica

- Guía y Pautas de Servicio y Reacondicionamiento (ART-14)..H-47125-3
- Gráfico P/T..H-71062-1
- Hojas de Datos de Seguridad de Materiales (HDSM)

## R-410A Refrigerant

**1** Where can I buy R-410A?

All DuPont Authorized Distributors have access to Suva® 410A. More than likely you will be servicing equipment with R-410. Therefore, you will want to work with your distributor so he knows to stock Suva® 410A. You will also want to keep Suva® 410A on hand to assure you are prepared to handle these service calls when they come in.

**2** What is Puron?

Both Puron® and Suva® 410A are marketing brands for ASHRAE R-410A. Puron is Carrier Corp's brand name and Suva® 410A is the DuPont brand for R-410A. Both have the same chemical composition and can be used interchangeably.

**3** Can R-410A be used to retrofit existing R-22 equipment?

NO! Because of the much higher discharge pressure and cooling capacity, R-410A should ONLY be used in equipment designed for it.

**4** Do I need different service tools to work on R-410A systems?

Yes. Because of the higher pressure, you should use manifold gauge sets designed for R-410A. In addition, you should use a recovery machine and recovery tanks designed for the higher pressure of R-410A. Recovery tanks should be specified as DOT 4BA400 or 4BW400.

**5** What type lubricant should be used with R-410A?

A high-quality POE (polyol ester) specified by the compressor or system OEM.

**6** How will system operation for R-410A be different than R-22?

Properties	R-410A vs. R-22
Discharge Pressure	+50 to 70%
Cooling Capacity	+40%
Discharge Temperature	-10°F
Energy Efficiency	Units can be designed to meet the proposed DOE guidelines of 12 to 14 SEER

**7** Will R-410A systems have different components than R-22 systems?

Yes. Because of the higher pressure for R-410A, most system components have been designed with increased wall thickness. In addition, expansion valves specifically designed for R-410A capacity should be used.

**8** Is R-410A a blend refrigerant?

Yes. It is a blend of HFC-32 and HFC-125 (50/50 wt%) that performs very much like a single component refrigerant.

**9** How should I charge R-410A?

For optimum performance, R-410A should be removed from the cylinder as a liquid.

°F	Freon® 22 (R-22)	Suva® 123 (R-123)	Suva® 134A (R-134A)	Suva® 404A (HP62)	Suva® 410A (9100) (R-410A)	Suva® 507 (AZ-50) (R-507)	Suva® 95 (R-508B)	°C
-120							3.0"	-84.8
-115							5.9"	-81.7
-110							9.2"	-78.9
-105							12.8"	-76.1
-100							16.9"	-73.3
-95							21.4"	-70.6
-90							26.4"	-67.8
-85							31.9"	-65.0
-80							37.9"	-62.2
-75					10.2"		44.5"	-59.4
-70					7.0"		51.5"	-56.7
-65					3.4"		59.6"	-53.9
-60	12.4"				0.3"		68.1"	-51.1
-55	9.7"				2.5"		77.3"	-48.3
-50	6.6"		19.1"	0.2"	5.0"	0.9"	87.3"	-45.6
-48	5.3"		18.4"	1.0"	6.1"	1.8"	91.5"	-44.4
-46	3.9"		17.7"	1.8"	7.2"	2.7"	95.8"	-43.3
-44	2.5"		16.9"	2.7"	8.3"	3.6"	100.0"	-42.2
-42	1.0"		16.1"	3.6"	9.5"	4.6"	105.0"	-41.1
-40	0.5"		15.2"	4.6"	10.8"	5.6"	109.0"	-40.0
-38	1.1"		14.3"	5.6"	12.1"	6.6"	114.0"	-38.9
-36	1.9"		13.4"	6.6"	13.4"	7.7"	119.0"	-37.8
-34	2.8"		12.4"	7.7"	14.9"	8.8"	124.0"	-36.7
-32	3.7"		11.3"	8.8"	16.3"	10.0"	129.0"	-35.6
-30	4.7"		10.2"	9.9"	17.8"	11.2"	135.0"	-34.4
-28	5.7"		9.1"	11.1"	19.4"	12.5"	140.0"	-33.3
-26	6.7"		7.9"	12.4"	21.0"	13.8"	146.0"	-32.2
-24	7.8"		6.6"	13.7"	22.7"	15.1"	152.0"	-31.1
-22	8.9"		5.3"	15.0"	24.5"	16.5"	158.0"	-30.0
-20	10.0"		4.0"	16.4"	26.3"	18.0"	164.0"	-28.9
-18	11.2"		2.5"	17.8"	28.2"	19.5"	170.0"	-27.8
-16	12.4"		1.1"	19.3"	30.1"	21.0"	177.0"	-26.7
-14	13.7"		0.2"	20.8"	32.1"	22.6"	184.0"	-25.6
-12	15.0"		1.0"	22.4"	34.2"	24.3"	191.0"	-24.4
-10	16.4"		1.9"	24.0"	36.4"	26.0"	198.0"	-23.3
-8	17.8"		2.7"	25.7"	38.6"	27.8"	205.0"	-22.2
-6	19.3"		3.6"	27.4"	40.9"	29.6"	212.0"	-21.1
-4	20.8"		4.5"	29.2"	43.3"	31.4"	220.0"	-20.0
-2	22.4"		5.5"	31.1"	45.7"	33.4"	227.0"	-18.9
0	24.0"		6.5"	33.0"	48.2"	35.4"	235.0"	-17.8
2	25.7"		7.5"	35.0"	50.8"	37.4"	244.0"	-16.7
4	27.4"		8.6"	37.0"	53.5"	39.5"	252.0"	-15.6
6	29.2"		9.7"	39.1"	56.3"	41.7"	260.0"	-14.4
8	31.0"		10.8"	41.3"	59.2"	44.0"	269.0"	-13.3
10	32.9"		12.0"	43.5"	62.1"	46.3"	278.0"	-12.2
12	34.8"		13.2"	45.8"	65.2"	48.6"	287.0"	-11.1
14	36.8"		14.5"	48.2"	68.3"	51.1"	297.0"	-10.0
16	38.9"		15.8"	50.6"	71.5"	53.6"	307.0"	-8.9

18	41.0"		17.2"	53.1"	74.8"	56.2"	316.0"	-7.8
20	43.2"	22.8"	18.6"	55.7"	78.2"	58.8"	326.0"	-6.7
22	45.5"	22.4"	20.0"	58.4"	81.7"	61.6"	336.0"	-5.6
24	47.8"	22.0"	21.5"	61.1"	85.3"	64.4"	346.0"	-4.4
26	50.2"	21.6"	23.1"	63.9"	89.1"	67.3"	357.0"	-3.3
28	52.6"	21.2"	24.7"	66.8"	92.9"	70.2"	368.0"	-2.2
30	55.1"	20.8"	26.3"	69.7"	96.8"	73.3"	379.0"	-1.1
32	57.7"	20.3"	28.0"	72.8"	101.0"	76.4"	390.0"	0
34	60.4"	19.9"	29.7"	75.9"	105.0"	79.6"	402.0"	1.1
36	63.1"	19.4"	31.5"	79.1"	109.0"	82.9"	414.0"	2
38	65.9"	18.8"	33.4"	82.4"	114.0"	86.2"	426.0"	3.3
40	68.7"	18.3"	35.3"	85.7"	118.0"	89.7"	438.0"	4.4
42	71.7"	17.7"	37.3"	89.2"	123.0"	93.2"	451.0"	5.6
44	74.7"	17.1"	39.3"	92.7"	127.0"	96.9"	464.0"	6.7
46	77.8"	16.5"	41.4"	96.4"	132.0"	100.6"	477.0"	7.8
48	81.0"	15.9"	43.5"	100.1"	137.0"	104.4"	490.0"	8.9
50	84.2"	15.2"	45.7"	103.9"	142.0"	108.3"	504.0"	10.0
55	92.7"	13.4"	51.5"	114.0"	156.0"	119.0"	539.0"	12.8
60	102.0"	11.4"	57.7"	124.0"	170.0"	129.0"		15.6
65	111.0"	9.3"	64.3"	136.0"	185.0"	141.0"		18.3
70	122.0"	6.9"	71.3"	148.0"	200.0"	153.0"		21.1
75	132.0"	4.3"	78.9"	160.0"	217.0"	166.0"		23.9
80	144.0"	1.5"	86.9"	174.0"	235.0"	180.0"		26.7
85	156.0"	0.8"	95.4"	188.0"	254.0"	194.0"		29.4
90	168.0"	2.4"	104.0"	203.0"	274.0"	210.0"		32.2
95	182.0"	4.2"	114.0"	218.0"	295.0"	226.0"		35.0
100	196.0"	6.1"	124.0"	235.0"	317.0"	243.0"		37.8
105	210.0"	8.1"	135.0"	252.0"	340.0"	261.0"		40.6
110	226.0"	10.3"	146.0"	270.0"	364.0"	280.0"		43.3
115	242.0"	12.7"	158.0"	290.0"	390.0"	300.0"		46.1
120	260.0"	15.2"	171.0"	310.0"	417.0"	322.0"		48.9
125	278.0"	17.8"	184.0"	331.0"	445.0"	344.0"		51.7
<								
130	296.0"	20.7"	199.0"	353.0"	475.0"	368.0"		54.4
135	316.0"	23.7"	213.0"	376.0"	506.0"	392.0"		57.2
140	337.0"	27.0"	229.0"	401.0"	538.0"	418.0"		60.0
145	359.0"	30.4"	246.0"	426.0"	573.0"	446.0"		62.8
150	381.0"	34.0"	263.0"	453.0"	608.0"	475.0"		65.6