

A-Gas' Guide to Calculating CO2 Equivalent

HFC REFRIGERANTS GWP BELOW 2500



ASHREA NUMBER	BRAND NAME	GWP (AR4)
R134a	Suva 134a	1430
R245FA	Genetron 245fa	1030
R32		675
R407A		2107
R407C	Klea66, Suva 9000	1774
R407F	Performax LT	1825
R410A	AZ20	2088
R417A	Isceon 59 / Solvay 22M	2346
R423A	Isceon 39tc	2060
R424A	RS44	2440
R426A	RS24	1508
R427A	FX100	2138
R437A	Isceon 49 plus	1805
R438A	Isceon 99	2252
R442A	RS50	1888
R448A	Solstice® N40	1387
R449A	OPTEON® XP40	1397
R450A	Solstice® N13	604
R452A	OPTEON® XP44	2140
R452B	OPTEON® XL55	676
R453A	RS70	1765
R454A	Opteon® XL40	238

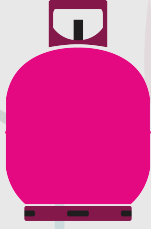
HFO REFRIGERANTS

ASHREA NUMBER	BRAND NAME	GWP (AR4)
HFO1234yf	XL10	4
HFO1234ze		7
HFO1233zd(E)		4.5
HFO1233zd(E)	Genesolv PFC	4.5
HFO1233zd(E)	Genesolv LBA	4.5

NATURAL REFRIGERANTS

ASHREA NUMBER	BRAND NAME	GWP (AR4)
R170	Ethane	6
R290	Care 40	3
R600a	Care 10	4
R717	Ammonia	0
R744	Carbon Dioxide	1
R1150	Ethylene	4
R1270	Care 45	2
	Care 30	3
	Care 50	7

GWP REFRIGERANTS LIST



HFC REFRIGERANTS GWP ABOVE 2500



A-GAS®

ASHREA NUMBER	BRAND NAME	GWP (AR4)
R23		14800
R404A	FX70, HP62	3922
R422A	Isceon 79	3143
R422D	Isceon 29	2729
R428A	RS52	3607
R434A	RS45	3238
R507	Isceon 507 (AZ50)	3985
R508A		13214
R508B	Suva 95	13396
	Isceon 89	3805

Use the **GWP List** to calculate the CO2 equivalent with this formula **Charge x GWP ÷ 1000 = System charge in t CO2 eq**
 For example the CO2 equivalent of 10kg of 404A is calculated as follows:

Refrigerant	R404A
GWP	3922
System charge	10 kgs
Kg in 1 ton	1000

Example

$$10 \times 3922 \div 1000 = 3.922 \text{ t CO2 eq}$$

Leak testing frequencies can be found using our [Leak Testing Guide](#).

GWP Values in accordance with IPCC Fourth Assessment Report (AR4).