

# Fluorinate Greenhouse Gases Charge in Kg's to CO<sub>2</sub> Equivalent

www.fgasregistration.ie

- Once the charge in kilograms is known, it is multiplied by the GWP of the F-Gas used, then divide by 1,000 in order to obtain the charge in tons of CO<sub>2</sub> equivalents
- 1Kg of R134a x 1,430 GWP ÷ 1,000 = 1.43t CO<sub>2</sub>
- 3Kg of R134a x 1,430 GWP ÷ 1,000 = 4.29t CO<sub>2</sub>
- 3.5Kg of 134a x 1,430 GWP ÷ 1,000 = 5.00t CO<sub>2</sub>
- 5Kg of R134a x 1,430 GWP ÷ 1,000 = 7.15t CO<sub>2</sub>



- Once the charge in kilograms is known, it is multiplied by the GWP of the F-Gas used, then divide by 1,000 in order to obtain the charge in tons of CO<sub>2</sub> equivalents
- 1Kg of R32 x 675 GWP ÷ 1,000 = 0.67t CO<sub>2</sub>
- 3Kg of R32 x 675 GWP ÷ 1,000 = 2.02t CO<sub>2</sub>
- 5Kg of R32 x 675 GWP ÷ 1,000 = 3.37t CO<sub>2</sub>
- 7.4kg of R32 x 675 GWP ÷ 1,000 = 5.00t CO<sub>2</sub>



- Once the charge in kilograms is known, it is multiplied by the GWP of the F-Gas used, then divide by 1,000 in order to obtain the charge in tons of CO<sub>2</sub> equivalents
- 1Kg of R404A x 3,922 GWP ÷ 1,000 = 3.92t CO<sub>2</sub>
- 1.3Kg of R404A x 3,922 GWP ÷ 1,000 = 5.09t CO<sub>2</sub>
- 3Kg of R404A x 3,922 GWP ÷ 1,000 = 11.76t CO<sub>2</sub>
- 5Kg of R404A x 3,922 GWP ÷ 1,000 = 19.61t CO<sub>2</sub>



- Once the charge in kilograms is known, it is multiplied by the GWP of the F-Gas used, then divide by 1,000 in order to obtain the charge in tons of CO<sub>2</sub> equivalents
- 1Kg of R407C x 1,774 GWP ÷ 1,000 = 1.77t CO<sub>2</sub>
- 2.8Kg of R407C x 1,774 GWP ÷ 1,000 = 4.96t CO<sub>2</sub>
- 3Kg of R407C x 1,774 GWP ÷ 1,000 = 5.32t CO<sub>2</sub>
- 5Kg of R407C x 1,772 GWP ÷ 1,000 = 8.87t CO<sub>2</sub>



- Once the charge in kilograms is known, it is multiplied by the GWP of the F-Gas used, then divide by 1,000 in order to obtain the charge in tons of CO<sub>2</sub> equivalents
- 1Kg of R410A x 2,088 GWP ÷ 1,000 = 2.08t CO<sub>2</sub>
- 2.4Kg of R410A x 2,088 GWP ÷ 1,000 = 5.01t CO<sub>2</sub>
- 3Kg of R410A x 2,088 GWP ÷ 1,000 = 6.26t CO<sub>2</sub>
- 5Kg of R410A x 2,088 GWP ÷ 1,000 = 10.44t CO<sub>2</sub>



- Once the charge in kilograms is known, it is multiplied by the GWP of the F-Gas used, then divide by 1,000 in order to obtain the charge in tons of CO<sub>2</sub> equivalents
- 1Kg of R442D x 2,729 GWP ÷ 1,000 = 2.02t CO<sub>2</sub>
- 1.8Kg of R442D x 2,729 GWP ÷ 1,000 = 4.91t CO<sub>2</sub>
- 3Kg of R442D x 2,729 GWP ÷ 1,000 = 8.18t CO<sub>2</sub>
- 5Kg of R442D x 2,729 GWP ÷ 1,000 = 13.64t CO<sub>2</sub>



- Once the charge in kilograms is known, it is multiplied by the GWP of the F-Gas used, then divide by 1,000 in order to obtain the charge in tons of CO<sub>2</sub> equivalents
- 1Kg of R507A x 3,985 GWP ÷ 1,000 = 3.98t CO<sub>2</sub>
- 1.3Kg of R507A x 3,986 GWP ÷ 1,000 = 5.18t CO<sub>2</sub>
- 3Kg of R507A x 3,985 GWP ÷ 1,000 = 11.95t CO<sub>2</sub>
- 5Kg of R507A x 3,985 GWP ÷ 1,000 = 19.92t CO<sub>2</sub>



#### Charge Limits in t CO<sub>2</sub>-equivalent

		5	40	50	500	1,000
Refrigerant	GWP	Conversion of Charge Limits in Kg				
R134a	1,430	3.5	28.0	35.0	349.7	699.3
R32	675	7.4	59.3	74.1	740.7	1,481.5
R404A	3,922	1.3	10.2	12.7	127.5	225.0
R407C	1,774	2.8	22.5	28.2	281.9	536.7
R410A	2,088	2.4	19.2	24.0	239.5	479.0
R442D	2,729	1.8	14.7	18.3	183.2	366.4
R507A	3,985	1.3	10.0	12.5	125.5	250.9



# Fluorinate Greenhouse Gases Charge in Kg's to CO<sub>2</sub> Equivalent

www.fgasregistration.ie