

Fluorinated greenhouse gases (F gases)

This is a table of fluorinated greenhouse gases (F gases) regulated by the EU.

Only the hydrofluorocarbon (HFC) gases listed in section 1 of the table are part of the EU's HFC phase down.

The table includes the global warming potential of each F gas. You can use the global warming potential to calculate the carbon dioxide equivalent weight of an F gas.

Section 1: Hydrofluorocarbons (HFCs)

| Industrial designation | Substance | | Global warming potential |
|------------------------|---------------------------------------|---|--------------------------|
| | Chemical name (Common name) | Chemical formula | |
| HFC-23 | trifluoromethane (fluoroform) | CHF ₃ | 14 800 |
| HFC-32 | difluoromethane | CH ₂ F ₂ | 675 |
| HFC-41 | fluoromethane (methyl fluoride) | CH ₃ F | 92 |
| HFC-125 | pentafluoroethane | CHF ₂ CF ₃ | 3 500 |
| HFC-134 | 1,1,2,2-tetrafluoroethane | CHF ₂ CHF ₂ | 1 100 |
| HFC-134a | 1,1,1,2-tetrafluoroethane | CH ₂ FCF ₃ | 1 430 |
| HFC-143 | 1,1,2-trifluoroethane | CH ₂ FCHF ₂ | 353 |
| HFC-143a | 1,1,1-trifluoroethane | CH ₃ CF ₃ | 4 470 |
| HFC-152 | 1,2-difluoroethane | CH ₂ FCH ₂ F | 53 |
| HFC-152a | 1,1-difluoroethane | CH ₃ CHF ₂ | 124 |
| HFC-161 | fluoroethane (ethyl fluoride) | CH ₃ CH ₂ F | 12 |
| HFC-227ea | 1,1,1,2,3,3,3-heptafluoropropane | CF ₃ CHFCF ₃ | 3 220 |
| HFC-236cb | 1,1,1,2,2,3-hexafluoropropane | CH ₂ FCF ₂ CF ₃ | 1 340 |
| HFC-236ea | 1,1,1,2,3,3-hexafluoropropane | CHF ₂ CHFCF ₃ | 1 370 |
| HFC-236fa | 1,1,1,3,3,3-hexafluoropropane | CF ₃ CH ₂ CF ₃ | 9 810 |
| HFC-245ca | 1,1,2,2,3-pentafluoropropane | CH ₂ FCF ₂ CHF ₂ | 693 |
| HFC-245fa | 1,1,1,3,3-pentafluoropropane | CHF ₂ CH ₂ CF ₃ | 1 030 |
| HFC-365 mfc | 1,1,1,3,3-pentafluorobutane | CF ₃ CH ₂ CF ₂ CH ₃ | 794 |
| HFC-43-10 mee | 1,1,1,2,2,3,4,5,5,5-decafluoropentane | CF ₃ CHFCHFCF ₂ CF ₃ | 1 640 |

Section 2: Perfluorocarbons (PFCs)

| Substance | | | Global warming potential |
|------------------------|--|---------------------------------|--------------------------|
| Industrial designation | Chemical name (Common name) | Chemical formula | |
| PFC-116 | hexafluoroethane (perfluoroethane) | C ₂ F ₆ | 12 200 |
| PFC-218 | octafluoropropane (perfluoropropane) | C ₃ F ₈ | 8 830 |
| PFC-3-1-10 (R-31-10) | decafluorobutane (perfluorobutane) | C ₄ F ₁₀ | 8 860 |
| PFC-4-1-12 (R-41-12) | dodecafluoropentane (perfluoropentane) | C ₅ F ₁₂ | 9 160 |
| PFC-5-1-14 (R-51-14) | tetradecafluorohexane (perfluorohexane) | C ₆ F ₁₄ | 9 300 |
| PFC-c-318 | octafluorocyclobutane (perfluorocyclobutane) | c-C ₄ F ₈ | 10 300 |

Section 3: Other perfluorinated compounds

| Substance | | | Global warming potential |
|------------------------|-----------------------------|------------------|--------------------------|
| Industrial designation | Chemical name (Common name) | Chemical formula | |
| | sulphur hexafluoride | SF ₆ | 22 800 |



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Thorne & Derrick
+44 (0) 191 410 4292
www.heatingandprocess.com