

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)

Substance			Global warming potential
Industrial designation	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 CHFCF 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