



Refrigerants — List of Single Compounds (non blends)

Part 2 of 3

December 2014

ASHRAE Number	Type	Chemical Name	ASHRAE 34 Safety Group	Atmosphere Life (years)	ODP	GWP	Suggested Replacement
R-11	CFC	trichlorofluoromethane	A1	45	1	4,750	R-123
R-12	CFC	dichlorodifluoromethane	A1	100	1	10,900	R-401A, R-401B, R-409A
R-13	CFC	chlorotrifluoromethane	A1	640	1	14,400	R-23, R-508B
R-13B1	BFC	bromotrifluoromethane (halon 1301)	A1	65	16	7,140	R-410A, R-508B
R-14	PFC	tetrafluoromethane (carbon tetrafluoride)	A1	50,000	0	7,390	
R-22	HCFC	chlorodifluoromethane	A1	12	0.05	1,810	R-407C, +18 more
R-23	HFC	trifluoromethane	A1	270	0	14,800	R-13
R-32	HFC	difluoromethane (methylene fluoride)	A2	4.9	0	675	
R-50	HC	methane	A3	12	<0	25	
R-113	CFC	1,1,2-trichloro-1,2,2-trifluoroethane	A1	85	1	6,130	
R-114	CFC	1,2-dichloro-1,1,2,2-tetrafluoroethane	A1	300	1	10,000	R-124, R-236fa
R-115	CFC	chloropentafluoroethane	A1	1700	0.44	7,370	
R-116	PFC	hexafluoroethane	A1	10,000	0	12,200	
R-123	HCFC	2,2-dichloro-1,1,1-trifluoroethane	B1	1.3	0.02	77	R-11
R-124	HCFC	2-chloro-1,1,1,2-tetrafluoroethane	A1	5.8	0.022	609	R-236fa
R-125	HFC	pentafluoroethane	A1	29	0	3,500	
R-134a	HFC	1,1,1,2-tetrafluoroethane	A1	14	0	1,430	R-12, R-22 flooded
R-141b	HCFC	1,1-dichloro-1-fluoroethane	A2	9.3	0.12	725	
R-142b	HCFC	1-chloro-1,1-difluoroethane	A2	17.9	0.07	2,310	
R-143a	HFC	1,1,1-trifluoroethane	A2	52	0	4,470	
R-152a	HFC	1,1-difluoroethane	A2	1.4	0	124	
R-170	HC	ethane	A3	12	<0		
R-227ea	HFC	1,1,1,2,3,3,3-heptafluoropropane	A1	34.2	0	3,220	R-114, R-124
R-236fa	HFC	1,1,1,3,3,3-hexafluoropropane	A1	240	0	9,810	R-114, R-124
R-245fa	HFC	1,1,1,3,3-pentafluoropropane	A1	7.6	0	1,030	
R-290	HC	propane	A3	12		<0	
R-600	HC	n-butane	A3	12		0	
R-600a	HC	2-methyl propane (isobutane)	A3	12		0	
R-601	HC	n-pentane	A3	12		0	
R-601a	HC	2-methyl butane (isopentane)	A3	12		0	
R-610	HC	ethyl ether	A3	12		<0	
R-704	He	helium	A1	Unlimited	0		
R-717	NH3	ammonia	B2	7 days	0	0	
R-718	H2O	water/steam	A1	9 days	0	.2	
R-729		air	A1	unlimited		0	
R-744	CO2	carbon dioxide	A1	29k – 36k	0	1	
R-744A	N2O	nitrous oxide	A1	114	0.017	298	
R-764	SO2	sulfur dioxide	B1	-	-	-	
R-1132a	HFO	1,1-difluoroethene (vinylidene fluoride)	-	-	0		
R-1140	HCO	chloroethene (vinyl chloride)	B3	-	-	-	
R-1150	HO	ethene (ethylene)	A3	12		<0	
R-1233zd	HFO	1-chloro-3,3,3-trifluoropropene	A2L		0	<5	R-123, Centrifugal chiller
R-1234yf	HFO	2,3,3,3-Tetrafluoropropene	A2L	11 days	0	4	R-134a, R-12
R-1234ze	HFO	1,3,3,3-Tetrafluoropropene	A2L		0	6	Centrifugal, Appliance, Blowing agent
R-1270	HO	propene (propylene)	A3	12		<0	

**Not a complete list of Refrigerants.** Information from various sources including ASHRAE, Honeywell, Wikipedia