

Class II ODS Chemicals

Chemical Name	HCFC	Symbol	CAS No.	Ref No.	Some Common Names
Dichlorofluoromethane	HCFC-21	CHFCl ₂	75-43-4	R-21	Freon 21
Monochlorodifluoromethane	HCFC-22	CHF ₂ Cl	75-45-6	R-22	Freon 22, Genetron 22, Forane 22, Refron 22
Monochlorofluoromethane	HCFC-31	CH ₂ FCl	593-70-4	R-31	Genetron 31
Tetrachlorofluoroethane	HCFC-121	C ₂ HFCl ₄	354-14-3		<lubricant>
Trichlorodifluoroethane	HCFC-122	C ₂ H ₂ F ₂ Cl ₃	354-21-2		<lubricant>
Dichlorotrifluoroethane	HCFC-123	C ₂ H ₂ F ₃ Cl ₂	306-83-2	R-123	Suva 123, Freon 123, Genetron 123, Halotron I
Monochlorotetrafluoroethane	HCFC-124	C ₂ H ₂ F ₄ Cl	2837-89-0	R-124	Suva 124, Freon 124, Genetron 124, FE-241
Trichlorofluoroethane	HCFC-131	C ₂ H ₂ FCl ₃	359-28-4		
Dichlorodifluoroethane	HCFC-132b	C ₂ H ₂ F ₂ Cl ₂	1649-08-7		
Monochlorotrifluoroethane	HCFC-133a	C ₂ H ₂ F ₃ Cl	75-88-7		
Dichlorofluoroethane	HCFC-141b	C ₂ H ₃ FCl ₂	1717-00-6		Ecolink 2005, Superflux Remover FR-A
Monochlorodifluoroethane	HCFC-142b	C ₂ H ₃ F ₂ Cl	75-68-3	R-142b	Genetron 142b
Hexachlorofluoropropane	HCFC-221	C ₃ HFCl ₆	422-26-4		
Pentachlorodifluoropropane	HCFC-222	C ₃ H ₂ F ₂ Cl ₅	422-49-1		
Tetrachlorotrifluoropropane	HCFC-223	C ₃ H ₂ F ₃ Cl ₄	422-52-6		
Trichlorotetrafluoropropane	HCFC-224	C ₃ H ₂ F ₄ Cl ₃	422-54-8		
Dichloropentafluoropropane	HCFC-225ca	C ₃ H ₂ F ₅ Cl ₂	422-56-0		Asahklin AK-225
Dichloropentafluoropropane	HCFC-225cb	C ₃ H ₂ F ₅ Cl ₂	507-55-1		
Monochlorohexafluoropropane	HCFC-226	C ₃ H ₂ F ₆ Cl	431-87-8		
Pentachlorofluoropropane	HCFC-231	C ₃ H ₂ FCl ₅	421-94-3		
Tetrachlorodifluoropropane	HCFC-232	C ₃ H ₂ F ₂ Cl ₄	460-89-9		
Trichlorotrifluoropropane	HCFC-233	C ₃ H ₂ F ₃ Cl ₃	7125-84-0		
Dichlorotetrafluoropropane	HCFC-234	C ₃ H ₂ F ₄ Cl ₂	425-94-5		
Monochloropentafluoropropane	HCFC-235	C ₃ H ₂ F ₅ Cl	460-92-4		
Tetrachlorofluoropropane	HCFC-241	C ₃ H ₃ FCl ₄	666-27-3		
Trichlorodifluoropropane	HCFC-242	C ₃ H ₃ F ₂ Cl ₃	460-63-9		
Dichlorotrifluoropropane	HCFC-243	C ₃ H ₃ F ₃ Cl ₂	460-69-5		
Monochlorotetrafluoropropane	HCFC-244	C ₃ H ₃ F ₄ Cl			
Trichlorofluoropropane	HCFC-251	C ₃ H ₄ FCl ₃	421-41-0		
Dichlorodifluoropropane	HCFC-252	C ₃ H ₄ F ₂ Cl ₂	819-00-1		
Monochlorotrifluoropropane	HCFC-253	C ₃ H ₄ F ₃ Cl	460-35-5		
Dichlorofluoropropane	HCFC-261	C ₃ H ₅ FCl ₂	420-97-3		
Monochlorodifluoropropane	HCFC-262	C ₃ H ₅ F ₂ Cl	421-02-03		
Monochlorofluoropropane	HCFC-271	C ₃ H ₆ FCl	430-55-7		

Class II ODS Refrigerant Blends

Refrigerant No.	HCFC	HCFC %	Ref. No. 2	Ref. No. 3	Ref No. 4	Some Common Names
R-401a	R-22	53	R-124	R-152a	--	MP-39
R-401b	R-22	61	R-124	R-152a	--	MP-66
R-402a	R-22	38	R-125	R-290	--	HP-80
R-402b	R-22	60	R-125	R-290	--	HP-81
R-403a	R-22	75	R-218	R-290	--	Isceon 69S
R-403b	R-22	56	R-218	R-290	--	Isceon 69L
R-405a	R-22	45	R-142b	R-152a	R-C318	G2015
R-406a	R-22	55	R-142b	R-600a	--	Autofrost GHG-X8
R-408a	R-22	47	R-143a	R-125	--	Forane FX-50
R-409a	R-22	60	R-124	R-142b	--	Forane FX-56
R-409b	R-22	65	R-124	R-142b	--	Forane FX-57
R-411a	R-22	87.5	R-152a	R-1270	--	
R-411b	R-22	94	R-152a	R-1270	--	
R-412a	R-22	70	R-142b	R-218	--	Arcton TP-5R
R-414a	R-22	51	R-124	R-142b	R-600a	Autofrost GHG-X4
R-414b	R-22	50	R-124	R-142b	R-600a	Hot Shot
R-415a	R-22	82	R-152a	--	--	Mackfri-401a
R-415b	R-22	25	R-152a	--	--	Mackfri-401b
R-416a	R-124	39.5	R-134a	R-600	--	FR-12, FRG C
R-418a	R-22	96	R-152a	R-290	--	
R-420a	R-142b	12	R-134a	--	--	
RB-276	R-142b	19	R-134a	Naptha	--	Free Zone