

INTRODUCTION

In July 1999, the first control measure applicable to developing countries under the Montreal Protocol came into effect: the freeze of CFCs at the average consumption and production levels from 1995-1997. In 2002, the same freeze comes into effect for halons and methyl bromide. During subsequent years, developing countries must meet significant reduction targets for CFCs and other ozone depleting substances (ODS).

To meet these phase out deadlines, developing countries need to undertake a comprehensive national phase-out programme including the establishment of appropriate policy and regulatory frameworks, as well as implementing monitoring and control tools. Controls on the supply of ODS will play an important role in these compliance measures.

The establishment of import and export licensing systems is mandatory for all Parties to the Montreal Protocol. Because those systems determine the accuracy and completeness of national ODS consumption data, by extension they are key tools to help measure and ensure compliance with the Protocol.¹

The success of an import/export licensing system depends to a large degree on National Ozone Units (NOUs), customs agencies and industry being able to distinguish between imported chemical products containing ODS and those that contain non-ozone depleting alternatives. Information on trade names in the market will also make it easier for them to track and combat illegal imports. Those officials require information about the commercial trade names of imported products that they encounter (as indicated on the product packaging and transaction/manifest papers), the chemical composition and manufacturer.

Furthermore, many users in small and medium-sized enterprises know the chemicals they use only by trade names. This is especially the case for solvents and refrigerant mixtures. It will help considerably in the work to increase awareness among users in small enterprises if they can differentiate between the trade names of ODS and non-ODS alternatives in the market.

In response to needs expressed by members of the Regional Networks of ODS Officers, and in support of decisions of the Parties to the Montreal Protocol on this topic, UNEP DTIE's OzonAction Programme regularly collects the trade names and composition of such chemical products and publishes them in this Inventory.

HOW TO USE THE LIST

The list is arranged by the type of substance (i.e. whether or not it is an ODS) and then alphabetically by trade name. The list provides the following information:

¹ See UNEP's *ODS Import/Export Licensing Systems Resource Module* available at www.uneptie.org/ozonaction/library/reports/main.html and *Handbook on Data Reporting Under the Montreal Protocol* available at www.uneptie.org/ozonaction/nou/datareport.html

Item	Explanation
Type	Whether the product is an ozone depleting substance (ODS) or a non-ozone depleting alternative. Products can contain one substance (single-component) or more than one substance (blend).
Trade name	The commercial name of the product under which it is marketed. A "*" indicates that the name is not yet verified.
Company	The name of the company that manufactures the product (i.e. the producer).
Composition	The chemical contents of the product (see below).
ASHRAE	A standard classification code for refrigerants. This column is marked "NA" (i.e. not applicable) for products that are not refrigerants.
Product discontinued	Whether the product is no longer manufactured by the producer. This is left blank for products that are still being manufactured, or when UNEP does not have confirmation that they have been discontinued.

Product composition can appear on the list one of three ways, depending on what information is available to UNEP:

Information available	Example of how it appears on the list	Explanation
All individual component substances and their percentages	HFC-32/HFC-125 (60/40)	The substance is composed of 60% HFC-32 and 40% HFC-125.
Some (but not all) of the component substances and their percentages are known	TCA (93)	93% of the substance is composed of 1,1,1-Trichloroethane (TCA), but the components of the remaining 7% are not known (in this case, they are probably stabilisers or co-solvents).
All individual component substances are known, but no information is available about their percentages	HCFC-141b/methanol	The substance is composed of a blend of HCFC-141b and methanol.

For those persons wishing additional information about the chemical products on this list, the contact addresses for the companies follows the trade names table.

ABOUT CHEMICAL PRODUCT TERMINOLOGY²

In order to maintain clarity in naming the chemical products used in modern industry, chemical manufacturers and consumers have developed an "industry code" for naming chemical compounds. Compounds such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs), are followed by a three number code that identifies the composition of the compound. The code is defined as follows:

CFC-xyz or HCFC-xyz or HFC-xyz

where:

x	is the number of carbon atoms in the compound minus 1 (if x = 0, then it is omitted from the code);
y	is the number of hydrogen atoms in the compound plus 1; and,
z	is the number of fluorine atoms.

For example, the formula for trichlorotrifluoroethane is $\text{CCl}_2\text{FCClF}_2$. Applying the naming convention to the formula, the code becomes:

X = 2 - 1 = 1	(Number of carbon atoms = 2)
Y = 0 + 1 = 1	(Number of hydrogen atoms = 0)
Z = 3	(Number of fluorine atoms = 3)

Thus, the code is 113 (this compound is CFC-113).

If x = 0, then xyz is not written as 0yz but simply yz.

Different suppliers use trade names in various ways: all of ICI's ArkloneTM products are 113-based, the suffix referring to the composition, ArkloneTM P and P-SM are pure 113, ArkloneTM E, L, A, F, etc. are blended with other solvents, such as methylene chloride, isopropanol, ethanol, etc.

However, Dupont's FreonTM products cover a wider range, including the refrigerants (for example FreonTM 11 and FreonTM 12). The Dupont 113-based systems have a prefix T (e.g. FreonTM TF, TMC, TP, TE, etc.).

1,1,1-Trichloroethane (TCA) is also known by several other names. The most common of these alternatives is methyl chloroform (MCF). This name is often felt to be unacceptable because it implies that the product contains chloroform, which is not the case. Another name which is becoming more popular in the U.S. is "trike." The usefulness of this name is often discounted as well since this name has previously been used for trichloroethylene.

² This section is based on Appendix D of *the 1991 Report of the UNEP Solvents, Coatings and Adhesives Technical Options Committee*.

Inventory of Trade Names of Ozone Depleting Substances and their Alternatives

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
Non-ODS blend					
	Argon	Minimax GmbH	IG-10 (formerly Inert Gas Blend C)	NA	
	Argonite	Ginge Kerr	IG-55 (formerly Inert Gas Blend B)	NA	
	Argonite	Ginge-Kerr as	IG-55	NA	
	Asahiklin SA-28	Asahi Glass Co. Ltd.	HFC-125/HFC-143a (50/50)	R-507A	
	Asahiklin SA-39	Asahi Glass Co. Ltd.	HFC-32/HFC-125/HFC-134a (23/25/52)		
	Asahiklin SA-45	Asahi Glass Co. Ltd.	HFC-32/HFC-125/HFC-143a/HFC-134a (10/40/30/20)		
	AZ-20	Honeywell (formerly Allied-Signal Inc.)	HFC-32/HFC-125 (50/50)	R-410A	
	AZ-50	Honeywell (formerly Allied-Signal Inc.)	HFC-125/HFC-143a (50/50)	R-507A	
	CARE 30	CARE refrigerants Calor Gas Ltd	isobutane/propane	R600a/R290	
	CARE 50	CARE refrigerants Calor Gas Ltd	propane/ethane	R290/R170	
	ColdFire 302	Firefreeze International	Surfacant Blend A		
	Duracool-12a	Duracool Ltd.	Methylethylmethane/2-methylpropane/dimethylmethane		
	Duracool-502a	Duracool Ltd.	Ethyl hydride/dimethylmethane		
	EcoloAce 404a	Showa Denko K.K.	HFC-125/HFC-143a/HFC-134a (44/52/4)	R-404A	
	EcoloAce 407c	Showa Denko K.K.	HFC-32/HFC-125a/HFC-134a	R-407C	
	FEAS	AES International Pty Ltd	Powdered Aerosol C	NA	
	Forane 404A	ATOFINA (formerly Elf Atochem)	HFC-125/HFC-134a/HFC-143a	R-404A	
	Forane 407C	ATOFINA (formerly Elf Atochem)	HFC-32/HFC-125/HFC-134a(23/25/52)	R-407C	
	Forane 410A (AZ-20)	ATOFINA (formerly Elf Atochem)	HFC-125/HFC-32(50/50)	R-410A	
	Forane 507	ATOFINA (formerly Elf Atochem)	HFC-125/HFC-143a	R-507	
	Forane FX 220	ATOFINA (formerly Elf Atochem)	HFC-23/HFC-32/HFC-134a (3/25/72)		
	Forane FX 40	ATOFINA (formerly Elf Atochem)	HFC-32/HFC-125/HFC-143a(10/45/45)	R-416A	
	Forane FX 70	ATOFINA (formerly Elf Atochem)	HFC-125/HFC-134a/HFC-143a(44/4/52)	R-404A	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Frigc FR-12	IGC Intermagnetics General	HFC-134a/HCFC-124/n-butane		
	FS 0140	Primex Aerospace Company	Inert Gas/Powdered Aerosol Blend	NA	
	Genetron 404A	Honeywell (formerly Allied-Signal Inc.)	HFC-125/HFC-143a/HFC-134a	R-404A	
	Genetron 407C	Honeywell (formerly Allied-Signal Inc.)	HFC-32/HFC-125/HFC-134a	R-407C	
	HC-12a	OZ Technology, Inc.	Hydrocarbon Blend B		
	HX4	Solvay Fluor GMBH	HFC-125/HFC-143a/HFC-134a/HFC-32	R-416A	
	Inergen	Ansul Fire Protection	IG-541	NA	
	ISCEON 49	Rhodia Organique Fine Ltd	HFC-134a/FC-218/isobutane (88/9/3)	R-413A	
	Klea 404A	ICI	HFC-125/HFC-143a/HFC-134a(44/52/4)	R-404A	
	Klea 407A	ICI	HFC-32/HFC-125/HFC-134a (20/40/40)	R-407A	
	Klea 407B	ICI	HFC-32/HFC-125/HFC-134a (10/70/20)	R-407B	
	Klea 407C	ICI	HFC-32/HFC-125/HFC-134a (23/25/52)	R-407C	
	Klea 407D	ICI	HFC-32/HFC-125/HFC-134a(15/15/70)	R-407D	
	Klea 410A	ICI	HFC-32/HFC-125(50/50)	R-410A	
	Klea 507	ICI	HFC-125/HFC-143a (50/50)	R-507A	
	Klea 508	ICI	HFC-23/FC-116(39/61)	R-508	
	Klea-407d	ICI	HFC-32/HFC-125/HFC-134a(15/15/70)	R-407D	
	Klea-5R3	ICI	HFC-23/HFC-116(39/61)	R-508A	
	Meforex 55	Ausimont SPA	R-125/143a/134a(44/52/4)	R-404A	
	Meforex 57	Ausimont SPA	R-125/143a(50/50)	R-507	
	Meforex 98	Ausimont SPA	R-32/125(50/50)	R-410A	
	OZ-12	OZ Technology, Inc.	Hydrocarbon Blend A		
	PGA	Powsus Inc.	Gelled Halocarbon/Dry Chemical Suspension	NA	
	R-404A	Daikin Industries Ltd	HFC-125/143a/134a(44/52/4)	R-404A	
	R-407C	Daikin Industries Ltd	HFC-32/125/134a(23/25/52)	R-407C	
	R-410A	Daikin Industries Ltd	HFC-32/125(50/50)	R-410A	
	Reclin 507	Solvay Fluor GMBH	HFC-125/HFC-143a(50/50)	R-507A	
	Rosstech 106 FE	Microcircuit Engineering Corporation	Glycol ethers/deionized water/glycols/isopropyl alcohol (63/30/3.5/3.5)	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Rosstech 119 EC	Microcircuit Engineering Corporation	Glycol ethers/deionized water/glycols/isopropyl alcohol (63/30/3.5/3.5)	NA	
	Rosstech 119 ME	Microcircuit Engineering Corporation	Glycol ethers/deionized water/glycols/isopropyl alcohol (63/30/3.5/3.5)	NA	
	Rosstech 133 SF	Microcircuit Engineering Corporation	Glycol ethers/deionized water/glycols/isopropyl alcohol (63/30/3.5/3.5)	NA	
	Rosstech 162 ND	Microcircuit Engineering Corporation	Glycol ethers/deionized water/glycols/isopropyl alcohol (63/30/3.5/3.5)	NA	
	Rosstech 190 AD	Microcircuit Engineering Corporation	Glycol ethers/deionized water/glycols/isopropyl alcohol (63/30/3.5/3.5)	NA	
	RX3	Rhodia Organique Fine Ltd	FC-218/HFC-125/NA		
	SFE	ADI Technologies, Inc.	Powdered Aerosol A	NA	
	Solkane 365 mfc	Solvay Fluor GMBH	Mixture of cyclo-, n- and iso- pentane	NA	
	Solkane 404A	Solvay Fluor GMBH	HFC-125/143a/134a(44/52/4)	R-404A	
	Solkane 407C	Solvay Fluor GMBH	HFC-32/125/134a(23/25/52)	R-407C	
	Solkane 410	Solvay Fluor GMBH	HFC-32/125(50/50)	R-410	
	Solkane 507	Solvay Fluor GMBH	HFC-143a/HFC-125 (50/50)	R-507A	
	Solkane XG87	Solvay Fluor GMBH	HFC-134a/HFC-152a (87/13)	NA	
	Solpower SP34E	Solpower Australia Pty Ltd	HFC-134a/Additives Hydrocarbon (98/2)		
	Soyuz	International Management Services Corp.	Powdered Aerosol C	NA	
	Suva 9000	Dupont	HFC-32/HFC-125/HFC-134a (23/25/52)	R-407C	
	Suva 9100	Dupont	HFC-32/HFC-125(45/55)	R-410B	
	Suva 95	Dupont	HFC-23/FC-116(46/54)	R-508B	
	Suva HP62	Dupont	HFC-125/HFC-134a/HFC-143a (44/4/52)	R-404A	
	Vertrel XF	Dupont-Misui Fluorochemicals Co. Ltd.	HFC-43-10 mee	NA	

Non-ODS single component

Asahiklin AK-134a	Asahi Glass Co. Ltd.	HFC-134a		
CARE 10	CARE refrigerants Calor Gas Ltd	isobutane	R600a	
CARE 40	CARE refrigerants Calor Gas Ltd	propane	R290	
CEA-308	3M	C3F8	NA	
CEA-410	3M	C4F10	NA	
CEA-410	3M	C4F10	NA	
CEA-614	3M	C6F14	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	CEA-614	3M	C6F14	NA	
	Duracool- 22a	Duracool Ltd.	Dimethylmethane		
	Dymel 134a	Dupont-Misui Fluorochemicals Co. Ltd.	HFC-134a		
	Dymel 152a	Dupont-Misui Fluorochemicals Co. Ltd.	HFC-152a		
	Ecolo ace 134a	Showa Denko K.K.	HFC-134a		
	Enviro-safe ES-12a	Autocool Refrigerants	Hydrocarbon		
	FE-13	Dupont	HFC-23	NA	
	FE-25	Dupont	HFC-125	NA	
	FE-25	Great Lakes Chemical	HFC-125	NA	
	FE-36	Dupont	HFC-236fa	NA	
	Floron 134a	SRF Limited	HFC-134a		
	FM-200	Great Lakes Chemical	HFC-227ea	NA	
	Forane 125	ATOFINA (formerly Elf Atochem)	HFC-125		
	Forane 134a	ATOFINA (formerly Elf Atochem)	HFC-134a	R-134a	
	Forane 32	ATOFINA (formerly Elf Atochem)	HFC-32		
	Formacel Z2	Dupont-Misui Fluorochemicals Co. Ltd.	HFC-152a		
	Formacel Z4	Dupont-Misui Fluorochemicals Co. Ltd.	HFC-134a		
	Genesolv 3100	Honeywell (formerly Allied-Signal Inc.)	HFC-356mcf		
	Genetron 23	Honeywell (formerly Allied-Signal Inc.)	HFC-23	R-23	
	Genetron 125	Honeywell (formerly Allied-Signal Inc.)	HFC-125	R-125	
	Genetron 134a	Honeywell (formerly Allied-Signal Inc.)	HFC-134a	R-134a	
	Genetron 152a	Honeywell (formerly Allied-Signal Inc.)	HFC-152a	R-152A	
	Halocarbon 14	Especial Gas Inc.	Tetrafluoroethane	Halocarbon 14	
	HFC 245fa	Honeywell (formerly Allied-Signal Inc.)	HFC-245fa		
	HFC-125	Daikin Industries Ltd	HFC-125		
	HFC-134a	Daikin Industries Ltd	HFC-134a		
	HFC-134A*	ATOFINA (formerly Elf Atochem)	HFC-143a		
	HFC-134a*	Solvay Fluor GMBH	HFC-134a		

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	HFC-143a	Daikin Industries Ltd	HFC-143a		
	HFC-143a*	ATOFINA (formerly Elf Atochem)	HFC-143a		
	HFC-152a	Daikin Industries Ltd	HFC-152a		
	HFC-152a*	Changshu 3F Refrigerant Plant	HFC-152a	HFC-152a	
	HFC-23	Daikin Industries Ltd	HFC-23	R-23	
	HFC-32	Daikin Industries Ltd	HFC-32		
	HFC-32	Honeywell (formerly Allied-Signal Inc.)	HFC-32		
	HFC-32*	Showa Denko K.K.	HFC-32		
	KLEA 134a	ICI	HFC-134a	R-134A	
	Klea 23	ICI	HFC-23	R-23	
	KLEA 32	ICI	HFC-32		
	Meforex 125	Ausimont SPA	HFC-125	R-125	
	Meforex 134a	Ausimont SPA	HFC-134a	R-134a	
	Meforex 143a	Ausimont SPA	HFC-143a	R-143a	
	Meforex 218	Ausimont SPA	perfluoropropane	R-218	
	Meforex 227ea	Ausimont SPA	CF3CHFCF3	R-227ea	
	Meforex 32	Ausimont SPA	CH2F2	R-32	
	Novec 1230	3M			
	Novec HFE-1700	3M	HFE-7100		
	PFC-116	Daikin Industries Ltd	PFC-116	NA	
	PFC-14	Daikin Industries Ltd	PFC-14	NA	
	PFC-218	Daikin Industries Ltd (?)	C3F8	NA	
	PFC-410	Daikin Industries Ltd (?)	C4F10	NA	
	PFC-614	Daikin Industries Ltd (?)	C6F14	NA	
	PFC-c318	Daikin Industries Ltd	PFC-c318	NA	
	PFS-1	Ausimont K.K	perfluoropolyether	NA	
	R 134a	NRP Refrigeration Ltd, UK	HFC-134a	R-134A	
	Solkane 152a	Solvay Fluor GMBH	HFC-152a	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Solkane 227 pharma	Solvay Fluor GMBH	1,1,1,2,3,3,3-Heptafluoropropane	NA	
	Solkane 227 techn	Solvay Fluor GMBH	1,1,1,2,3,3,3-Heptafluoropropane		
	Solkane 23	Solvay Fluor GMBH	CHF3	R-23	
	Suva 134a	Dupont	HFC-134a	R-134a	
	Triodide	Newhouse International, Inc.	CF3I	NA	
	Vertrel	Dupont	Decafluoropenta	NA	

ODS blend

Algofrene 502	Ausimont SPA	CFC-115/HCFC-22 (51/49)	R-502	
Aquadry 50	Asahi Chemical Industry Co. Ltd.	TCA(94)	NA	
Arcton 402A	ICI	HCFC-22/HFC-125/HC-290 (38/60/2)	R-402A	
Arcton 402B	ICI	HCFC-22/HFC-125/HC-2907(60/38/2)	R-402B	
Arcton 408A	ICI	HCFC-22/HFC-125/HFC-143a (47/7/46)	R-408A	
Arcton 409a	ICI	HCFC-22/HCFC-124/HCFC-142b(60/25/15)	R-409a	
Arcton 412A	ICI	HCFC-22/FC-218/HCFC-142b (70/5/25)	R-412A	
Arcton 509	ICI	HCFC-22/FC-218 (44/56)	R-509	
Arcton TP5R	ICI	HCFC-22/FC-218/HCFC-142b(70/5/25)	R-412B	Yes
Arcton TP5R2	ICI	HCFC-22/FC-218(44/56)	R-509	Yes
Arcton-502	ICI	HCFC-22/CFC-115(48.8/51.2)	R-502	
Arklone AM	ICI	CFC-113(94.2)	NA	Yes
Arklone AMD	ICI	CFC-113(94.1)	NA	Yes
Arklone AS	ICI	CFC-113(96)	NA	Yes
Arklone EXT	ICI	CFC-113(64.7)	NA	Yes
Arklone K	ICI	CFC-113(75)	NA	Yes
Arklone L	ICI	CFC-113(97.1)	NA	Yes
Arklone W	ICI	CFC-113(91.5)	NA	Yes
Asahifron R-500	Asahi Glass Co. Ltd.	CFC-12/HFC-152a (73.8/26.2)	R-500	
Asahifron R-502	Asahi Glass Co. Ltd.	CFC-115/HCFC-22 (48.8/51.2)	R-502	
Asahiklin AK-225AE	Asahi Glass Co. Ltd.	HCFC-225/Ethanol	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Asahiklin AK-225AES	Asahi Glass Co. Ltd.	HCFC-225/Ethanol	NA	
	Asahiklin AK-225DH	Asahi Glass Co. Ltd.	HCFC-225/Surfactant	NA	
	Asahiklin AK-225DW	Asahi Glass Co. Ltd.	HCFC-225/Surfactant	NA	
	Asahitriethane	Asahi Glass Co. Ltd.	TCA(96)	NA	
	Asahitriethane ALS	Asahi Glass Co. Ltd.	TCA(93)	NA	
	Asahitriethane BS	Asahi Glass Co. Ltd.	TCA(92)	NA	
	Asahitriethane EC Grade	Asahi Glass Co. Ltd.	TCA(96)	NA	
	Asahitriethane LS	Asahi Glass Co. Ltd.	TCA(96)	NA	
	Asahitriethane UT	Asahi Glass Co. Ltd.	TCA(96)	NA	
	Asahitriethane V5	Asahi Glass Co. Ltd.	TCA(91)	NA	
	Blitz III	North American Fire Guardian	Prop. add/HCFC-123	NA	
	Carbon Tetrachloride	Mitsui Toatsu Chemicals	CTC(99.9)	NA	
	CG Triethane F	Central Glass Co. Ltd.	TCA(97]	NA	
	CG Triethane N	Central Glass Co. Ltd.	TCA(97)	NA	
	CG Triethane NN	Central Glass Co. Ltd.	TCA(96)	NA	
	CG Triethane NNA	Central Glass Co. Ltd.	TCA(94)	NA	
	CG Triflon A	Central Glass Co. Ltd.	CFC-113(87.5)	NA	
	CG Triflon C1	Central Glass Co. Ltd.	CFC-113(98.7)	NA	
	CG Triflon CP	Central Glass Co. Ltd.	CFC-113(90)	NA	
	CG Triflon D3	Central Glass Co. Ltd.	CFC-113(99.4)	NA	
	CG Triflon DI	Central Glass Co. Ltd.	CFC-113(99.5)	NA	
	CG Triflon E	Central Glass Co. Ltd.	CFC-113(96)	NA	
	CG Triflon EC	Central Glass Co. Ltd.	CFC-113(85.5)	NA	
	CG Triflon EE	Central Glass Co. Ltd.	CFC-113(92)	NA	
	CG Triflon ES	Central Glass Co. Ltd.	CFC-113(95.5)	NA	
	CG Triflon FD	Central Glass Co. Ltd.	CFC-113(78)	NA	
	CG Triflon M	Central Glass Co. Ltd.	CFC-113(50.5)	NA	
	CG Triflon MES	Central Glass Co. Ltd.	CFC-113(93.3)	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	CG Triflon P	Central Glass Co. Ltd.	CFC-113(65)	NA	
	CG Triflon WI	Central Glass Co. Ltd.	CFC-113(91.2)	NA	
	Daiflon 500	Daikin Industries Ltd	CFC-12/HFC-152a (74/26)	R-500	
	Daiflon 502	Daikin Industries Ltd	CFC-115/HCFC-22 (51/49)	R-502	
	Daiflon S3-A	Daikin Industries Ltd	CFC-113(87.5)	NA	Yes
	Daiflon S3-E	Daikin Industries Ltd	CFC-113(96)	NA	Yes
	Daiflon S3-EN	Daikin Industries Ltd	CFC-113(86)	NA	Yes
	Daiflon S3-ES	Daikin Industries Ltd	CFC-113(95.3)	NA	Yes
	Daiflon S3-HN	Daikin Industries Ltd	CFC-113(90)	NA	Yes
	Daiflon S3-MC	Daikin Industries Ltd	CFC-113(50.5)	NA	Yes
	Daiflon S3-P35	Daikin Industries Ltd	CFC-113(65)	NA	Yes
	Daiflon S3-W6	Daikin Industries Ltd	CFC-113(91.5)	NA	Yes
	Di 24	Ausimont SPA	HCFC-124/HFC-134a/Butane (39/59/2)	R-416A	
	Di 36	Ausimont SPA	HCFC-22/HCFC-124/Butane (50/47/3)	R-416A	
	Di 44	Ausimont SPA	HFC-125/HFC-143a/HCFC-22/Propane (42/6/50/2)	R-416A	
	Dowclene (R) EC	Dow	TCA/perchloroethane (75/25)	NA	
	Ethana AL	Asahi Chemical Industry Co. Ltd.	TCA(94)	NA	
	Ethana FXN	Asahi Chemical Industry Co. Ltd.	TCA(90)	NA	
	Ethana HT	Asahi Chemical Industry Co. Ltd.	TCA(94)	NA	
	Ethana IRN	Asahi Chemical Industry Co. Ltd.	TCA(90)	NA	
	Ethana NU	Asahi Chemical Industry Co. Ltd.	TCA(94)	NA	
	Ethana RD	Asahi Chemical Industry Co. Ltd.	TCA(94)	NA	
	Ethana RS	Asahi Chemical Industry Co. Ltd.	TCA(84)	NA	
	Ethana SL	Asahi Chemical Industry Co. Ltd.	TCA(94)	NA	
	Ethana TS	Asahi Chemical Industry Co. Ltd.	TCA(94)	NA	
	Ethana VG	Asahi Chemical Industry Co. Ltd.	TCA(94)	NA	
	Flon Showa 500	Showa Denko K.K.	CFC-12/HFC-152a(74/26)	R-500	Yes
	Flon Showa 502	Showa Denko K.K.	CFC-115/HCFC-22(51/49)	R-502	Yes

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Flon Showa FS-3A	Showa Denko K.K.	CFC-113(87.5)	NA	Yes
	Flon Showa FS-3D	Showa Denko K.K.	CFC-113(99.9)	NA	Yes
	Flon Showa FS-3E	Showa Denko K.K.	CFC-113(96)	NA	Yes
	Flon Showa FS-3ES	Showa Denko K.K.	CFC-113(96)	NA	Yes
	Flon Showa FS-3M	Showa Denko K.K.	CFC-113(50.5)	NA	Yes
	Flon Showa FS-3MS	Showa Denko K.K.	CFC-113(50.5)	NA	Yes
	Flon Showa FS-3P	Showa Denko K.K.	CFC-113(65)	NA	Yes
	Flon Showa FS-3W	Showa Denko K.K.	CFC-113(91.5)	NA	Yes
	Forane 500	ATOFINA (formerly Elf Atochem)	CFC-12/HFC-152a (74/26)	R-500	
	Forane 502	ATOFINA (formerly Elf Atochem)	HCFC-22/CFC-115(48.8/51.2)	R-502	
	Forane FX 10	ATOFINA (formerly Elf Atochem)	HCFC-22/HFC-143a/HFC-125 (47/46/7)	R-408A	
	Forane FX 20	ATOFINA (formerly Elf Atochem)	HCFC-22/HFC-143a		
	Forane FX 55	ATOFINA (formerly Elf Atochem)	HCFC-22/HCFC-142b (60/40)	R-416A	
	Forane FX 56	ATOFINA (formerly Elf Atochem)	HCFC-22/HCFC-124/HCFC-142b (60/25/15)	R-409A	
	Forane FX 57	ATOFINA (formerly Elf Atochem)	HCFC-22/HCFC-124/HCFC-142b (65/25/10)	R-409B	
	Free Zone	Refrigerant Gases, Inc.	HCFC-142a/HFC-134a(19/79)		
	Freeze 12	Technical Chemicalk	HCFC-142b/HFC-134a(20/80)		
	Freezone	Patriot Consumer Products	HCFC Blend Delta		
	Freon MCA	Dupont	CFC-113(62.8)	NA	Yes
	Freon MCA	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(63)	NA	Yes
	Freon SMT	Dupont	CFC-113(69)	NA	Yes
	Freon SMT	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(69.1)	NA	Yes
	Freon T-B1	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(98.6)	NA	Yes
	Freon T-DA35	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(99.7)	NA	Yes
	Freon T-DA35X	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(99.6)	NA	Yes
	Freon T-DEC	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(93.5)	NA	Yes
	Freon T-DECR	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(64.5)	NA	Yes
	Freon T-DFC	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(99.9)	NA	Yes

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Freon T-DFCX	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(99.9)	NA	Yes
	Freon T-E35	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(65)	NA	Yes
	Freon T-E6	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(94)	NA	Yes
	Freon T-P35	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(64.7)	NA	Yes
	Freon T-WD602	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(91.5)	NA	Yes
	Freon TA	Dupont	CFC-113(88.9)	NA	Yes
	Freon TA	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(88.9)	NA	Yes
	Freon TDF	Dupont	CFC-113(99.9)	NA	Yes
	Freon TE	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(95.5)	NA	Yes
	Freon TES	Dupont	CFC-113(95.2)	NA	Yes
	Freon TES	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(95.2)	NA	Yes
	Freon TMC	Dupont	CFC-113(50.5)	NA	yes
	Freon TMC	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(50.5)	NA	Yes
	Freon TMS	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(94.0)	NA	Yes
	Freon TMS solvents	Dupont	CFC-113(94.05)	NA	Yes
	Freon TP35	Dupont	CFC-113(64.7)	NA	Yes
	Freon TWD 602	Dupont	CFC-113(91.5)	NA	Yes
	Freon-502	Dupont	CFC-115/HCFC-22(51/49)	R-502	Yes
	FRIGC	Intermagnetics General	HCFC-124/HFC-134a/Butane(39/59/2)		
	Frigen 500	Solvay Fluor GMBH	CFC-12/HFC-152a(74/26)	R-500	Yes
	Fronsolve AD-17	Asahi Glass Co. Ltd.	CFC-113(83)	NA	
	Fronsolve AD-7	Asahi Glass Co. Ltd.	CFC-113(99.5)	NA	
	Fronsolve AD-I9	Asahi Glass Co. Ltd.	CFC-113(82)	NA	
	Fronsolve AE	Asahi Glass Co. Ltd.	CFC-113(96)	NA	
	Fronsolve AES	Asahi Glass Co. Ltd.	CFC-113(96)	NA	
	Fronsolve AM	Asahi Glass Co. Ltd.	CFC-113(50.5)	NA	
	Fronsolve AMS	Asahi Glass Co. Ltd.	CFC-113(94)	NA	
	Fronsolve AP	Asahi Glass Co. Ltd.	CFC-113(65)	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	FX-56	ATOFINA (formerly Elf Atochem)	HCFC-22/HCFC-124/HCFC-142b (60/25/15)	R-409A	
	G 2015	China Sun	HCFC/HFC/Fluoroalkane Blend A	NA	
	G Triflon E35	Central Glass Co. Ltd.	CFC-113(65)	NA	
	G2015	China Sun	HCFC/HFC/Fluoroalkane Blend A	NA	
	G2015	GU/Greencool	HCFC-22/HFC-152a/HCFC-142b/RC318 (45/7/5.5/42.5)	R-405A	
	G2018A	GU/Greencool	R-1270/HCFC-22/HFC-152a (1.5/87.5/11)	R-411A	
	G2018B	GU/Greencool	R-1270/HCFC-22/HFC-152a (3/94/3)	R-411B	
	G2018C	Greencool	HCFC-22/HFC-152a/Propylene(95.5/1.5/3)		
	Genesolv 2000	Honeywell (formerly Allied-Signal Inc.)	HCFC-141b blend		
	Genesolv 2004	Honeywell (formerly Allied-Signal Inc.)	HCFC-141b/methanol	NA	
	Genesolv 2127	Honeywell (formerly Allied-Signal Inc.)	Azeotropic mixture of HCFC-123/Methanol/Nitromethane		
	Genetron 408A	Honeywell (formerly Allied-Signal Inc.)	HCFC-22/HFC-125/HFC-143a	R-498A	
	Genetron 409A	Honeywell (formerly Allied-Signal Inc.)	HCFC-22/HCFC-124/HCFC-142b	R409A	
	Genetron 500	Honeywell (formerly Allied-Signal Inc.)	CFC-12/HFC-152a (74/26)	R-500	
	Genetron 502	Honeywell (formerly Allied-Signal Inc.)	CFC-115/HCFC-22 (51/49)	R-502	
	Genetron 503	Honeywell (formerly Allied-Signal Inc.)	CFC-13/HFC-23		
	Genetron HP80	Honeywell (formerly Allied-Signal Inc.)	HCFC-22/HFC-125/Propane		
	Genetron HP81	Honeywell (formerly Allied-Signal Inc.)	HCFC-22/HFC-125/Propane		
	Genetron MP39	Honeywell (formerly Allied-Signal Inc.)	HCFC-22/HFC-152a/HCFC-124		
	Genetron MP66	Honeywell (formerly Allied-Signal Inc.)	HCFC-22/HFC-152a/HCFC-124		
	Genklene A	ICI	TCA(96.5)	NA	Yes
	Genklene LV	ICI	TCA(95.2)	NA	Yes
	Genklene LVJ	ICI	TCA(95.2)	NA	Yes
	Genklene LVS	ICI	TCA(95.7)	NA	Yes
	Genklene LVX	ICI	TCA(90.7)	NA	Yes
	Genklene N	ICI	TCA(95.4)	NA	Yes
	Genklene P	ICI	TCA(99.7)	NA	Yes
	Genklene PT	ICI	TCA(99.9)	NA	Yes

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	GHG	Monroe Air Tech	HCFC-22/HCFC-142b/Isobutane (55/41/4)	R-406A	
	GHG-HP	People's Welding Supply	HCFC-22/HCFC-142b/Isobutane(65/31/4)	R-406A	
	GHG-X4	People's Welding Supply	HCFC-22/HCFC-124/HCFC-142b/Isobutane(51/28.5/16.5/4)	R-414A	
	GHG-X5	People's Welding Supply	HCFC-22/HCFC-142b/HFC-227ae/Isobutane(41/15/40/4)	R-416A	
	GHG12	Indianapolis	HCFC-22/iso-butane/HCFC-142b (55/4/41)	R-406A	
	Halotron 1	American Pacific Corporation	HCFC Blend B	NA	
	Halotron 1	North American Fire Guardian	Primarily HCFC-123	NA	
	Halotron I	Halotron	HCFC-123 plus propane	NA	
	Hot Shot	ICOR	HCFC-22/HCFC-124/HCFC-142b/Isobutane(50/39/9.5/1.5)	R-414B	
	HyperClean Circuit Cleaner	Micro Care	HCFCs/Alcohol Blend	NA	
	ISCEON 500	Rhodia Organique Fine Ltd	CFC-12/HFC-152a(74/26)	R-500	
	ISCEON 502	Rhodia Organique Fine Ltd	HCFC-22/CFC-115		
	ISCEON 69L	Rhodia Organique Fine Ltd	HCFC-22/FC-218/propane (56/39/5)	R-403B	
	ISCEON 69S	Rhodia Organique Fine Ltd	HCFC-22/FC-218/propane (75/20/5)	R-403A	
	Kanden Triethane E	Kanto Denka Kogyo	TCA(98)	NA	
	Kanden Triethane EL	Kanto Denka Kogyo	TCA(97)	NA	
	Kanden Triethane ELV	Kanto Denka Kogyo	TCA(97)	NA	
	Kanden Triethane EP	Kanto Denka Kogyo	TCA(97)	NA	
	Kanden Triethane H	Kanto Denka Kogyo	TCA(97)	NA	
	Kanden Triethane HA	Kanto Denka Kogyo	TCA(94)	NA	
	Kanden Triethane HAK	Kanto Denka Kogyo	TCA(93)	NA	
	Kanden Triethane HB	Kanto Denka Kogyo	TCA(94)	NA	
	Kanden Triethane HC	Kanto Denka Kogyo	TCA(94)	NA	
	Kanden Triethane HF	Kanto Denka Kogyo	TCA(94)	NA	
	Kanden Triethane HG	Kanto Denka Kogyo	TCA(94)	NA	
	Kanden Triethane HS	Kanto Denka Kogyo	TCA(99)	NA	
	Kanden Triethane HT	Kanto Denka Kogyo	TCA(97)	NA	
	Kanden Triethane ND	Kanto Denka Kogyo	TCA(97)	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Kanden Triethane R	Kanto Denka Kogyo	TCA(97)	NA	
	Kanden Triethane SR	Kanto Denka Kogyo	TCA(90)	NA	
	Kanden Triethane SRA	Kanto Denka Kogyo	TCA(91)	NA	
	Magicdry MD 201	Daikin Industries Ltd	CFC-113(99.5)	NA	Yes
	Magicdry MD 202	Daikin Industries Ltd	CFC-113(99.5)	NA	Yes
	Magicdry MD 203	Daikin Industries Ltd	CFC-113(99.5)	NA	Yes
	Magicdry MD-E35	Daikin Industries Ltd	CFC-113(65)	NA	Yes
	Magicdry MD-E6	Daikin Industries Ltd	CFC-113(94)	NA	Yes
	Mc Cool R-12	McCullen Oil Products	HCFC-22/HCFC-142b/Isobutane (55/41/4)	R-406A	
	MS-136N/CO2	Miller Stephenson Chemical Co.	1,1,1-trichloroethane	NA	
	NAF P III	Safety Hi-Tech	HCFC-123/HCFC-124/HFC-134a (55/31/10)	NA	
	NAF S III	Safety Hi-Tech	HCFC Blend A	NA	
	NAF SIII	Multron Systems Pte. Ltd.	HCFC Blend	NA	
	NAF-P-III	North American Fire Guardian	Proprietary additive/HCFC-123/HCFC-124/HFC-134a	NA	
	NAF-S-III	North American Fire Guardian	HCFC-22/HCFC-123/HCFC-124/Organic (82/4.75/9.5/3.75)	NA	
	NARM-502		HCFC-22/HFC-152a/HFC-23(90/5/5)		
	Oxyfume 12	Honeywell (formerly Allied-Signal Inc.)	Ethylene Oxide/CFC-12		
	Oxyfume 2000	Honeywell (formerly Allied-Signal Inc.)	Ethylene Oxide/HCFC-124		
	Oxyfume 2002	Honeywell (formerly Allied-Signal Inc.)	Ethylene Oxide/HCFC-124/HCFC-22		
	Penngas 2	Pennsylvania Engineering	HCFC Blend A		
	Propaklone	ICI	TCA(89.6)	NA	
	Shine Pearl	Toagosei	TCA(94)	NA	
	SIENKATANSO	Kanto Denka Kogyo	CTC(99.9)	NA	
	Solkane 141b DH	Solvay Fluor GMBH	HCFC-141b/waterproof additive	NA	
	Solkane 141b MA	Solvay Fluor GMBH	HCFC-141b/methanol	NA	
	Solkane 141b WE	Solvay Fluor GMBH	HCFC-141b/water/emulsifier	NA	
	Solkane 22/142b	Solvay Fluor GMBH	Mixture of R-22 and R-142b	NA	
	Solkane 406A	Solvay Fluor GMBH	HCFC-22/HCFC-142b/isobutane (55/41/4)	R-406A	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Solkane 409A	Solvay Fluor GMBH	HCFC-22/HCFC-124/HCFC-142b(60/25/15)	NA	
	Solvethane	Solvay Fluor GMBH	TCA (95.0)	NA	Yes
	Sunlovely	Asahi Glass Co. Ltd.	TCA (95)	NA	
	Suva HP80	Dupont	HCFC-22/HFC-125/Propane (38/60/2)	R-402A	
	Suva HP81	Dupont	HCFC-22/HFC-125/Propane (60/38/2)	R-402B	
	Suva MP39	Dupont	HCFC-22/HCFC-124/HFC-152a (53/34/13)	R-401A	
	Suva MP52	Dupont	HCFC-22/HCFC-124/HFC-152a (33/52/15)	R-401C	
	Suva MP66	Dupont	HCFC-22/HCFC-124/HFC-152a (61/28/11)	R-401B	
	Tafclen	Asahi Chemical Industry Co. Ltd.	TCA(90)	NA	
	Three One-A	Toagosei	TCA(95)	NA	
	Three One-AH	Toagosei	TCA(95)	NA	
	Three One-EX	Toagosei	TCA(90)	NA	
	Three One-F	Toagosei	TCA(95)	NA	
	Three One-HS	Toagosei	TCA(95)	NA	
	Three One-R	Toagosei	TCA(96)	NA	
	Three One-S	Toagosei	TCA(95)	NA	
	Three One-S(M)	Toagosei	TCA(95)	NA	
	Three One-T	Toagosei	TCA(95)	NA	
	Three One-TH	Toagosei	TCA(95)	NA	
	Toyoclean AL	Tosoh	TCA(95)	NA	
	Toyoclean ALS	Tosoh	TCA(91)	NA	
	Toyoclean EE	Tosoh	TCA(97)	NA	
	Toyoclean EM	Tosoh	TCA(96)	NA	
	Toyoclean HS	Tosoh	TCA(96)	NA	
	Toyoclean IC	Tosoh	TCA(91)	NA	
	Toyoclean NH	Tosoh	TCA(96)	NA	
	Toyoclean SE	Tosoh	TCA(84)	NA	
	Toyoclean T	Tosoh	TCA(97)	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
ODS single component					
1,1,1-tri		Vulcan Chemicals	1,1,1-trichloroethane	NA	
1,1,1-trichloroethane		Generic	1,1,1-trichloroethane	NA	
111 Tri		Vulcan	1,1,1-trichloroethane	NA	
A D Delco Fabric		Chem-Tek America	1,1,1-trichloroethane	NA	
Aerolex		National Chemsearch	1,1,1-trichloroethane	NA	
Aerolex		National Chemsearch America	1,1,1-trichloroethane	NA	
Aerothene (R) TA Solvent		Dow	1,1,1-trichloroethane	NA	
Aerothene (R) TT Solvent		Dow	TCA Aerosol Grade	NA	
Algofrene 11		Ausimont SPA	CFC-11		
Algofrene 113		Ausimont SPA	CFC-113		
Algofrene 114		Ausimont SPA	CFC-114		
Algofrene 115		Ausimont SPA	CFC-115		
Algofrene 12		Ausimont SPA	CFC-12		
Algofrene 12		Montefluos S.P.A.	CFC-12		
Algofrene 22		Ausimont SPA	HCFC-22	R-22	
Algofrene 22		Montefluos S.P.A.	HCFC-22		
Alpha 1220		Alpha Metals	1,1,1-trichloroethane	NA	
Arcton 11		ICI	CFC-11		
Arcton 114		ICI	CFC-114	NA	
Arcton 115		ICI	CFC-115	R-115	
Arcton 12		ICI	CFC-12	NA	
Arcton 13		ICI	CFC-13		
Arcton 22		ICI	HCFC-22	R-22	
Ardrox		Chemetall Asia Pte. Ltd. (formerly Brent (Asia) Pte. L	1,1,1-trichloroethane	NA	
Ardrox D495A Developer		Chemetall Asia Pte. Ltd. (formerly Brent (Asia) Pte. L	1,1,1-trichloroethane	NA	
Ardrox K410C Remover		Chemetall Asia Pte. Ltd. (formerly Brent (Asia) Pte. L	1,1,1-trichloroethane	NA	
Arklone P		ICI	CFC-113(100)	NA	Yes

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Arklone PSM	ICI	CFC-113(100)	NA	Yes
	Arrow C190 LEC	Arrow Chemicals	1,1,1-trichloroethane	NA	
	Asahifron R-11	Asahi Glass Co. Ltd.	CFC-11	R-11	
	Asahifron R-113	Asahi Glass Co. Ltd.	CFC-113	R-113	
	Asahifron R-114	Asahi Glass Co. Ltd.	CFC-114		
	Asahifron R-115	Asahi Glass Co. Ltd.	CFC-115		
	Asahifron R-12	Asahi Glass Co. Ltd.	CFC-12		
	Asahifron R-13	Asahi Glass Co. Ltd.	CFC-13		
	Asahifron R-152a	Asahi Glass Co. Ltd.	HFC-152a	R-152a	
	Asahifron R-22	Asahi Glass Co. Ltd.	HCFC-22		
	Asahiklin AK-123	Asahi Glass Co. Ltd.	HCFC-123		
	Asahiklin AK-124	Asahi Glass Co. Ltd.	HCFC-124		
	Asahiklin AK-141b	Asahi Glass Co. Ltd.	HCFC-141b		
	Asahiklin AK-142b	Asahi Glass Co. Ltd.	HCFC-142b		
	Asahiklin AK-225	Asahi Glass Co. Ltd.	HCFC-225		
	B-Lube	National Chemsearch	1,1,1-trichloroethane	NA	
	B-Lube	National Chemsearch America	1,1,1-trichloroethane	NA	
	Baltane	ATOFINA (formerly Elf Atochem)	1,1,1-trichloroethane		
	Brom-O-Gas	Great Lakes Chemical	methyl bromide	NA	
	C-60	Sprayway Inc.	1,1,1-trichloroethane	NA	
	Carbon Tetrachloride	Kureha Chemical Industry Co.	CTC(99.95)	NA	
	Carbontetrachloride	Riedel de Haen AG.	CTC	NA	
	CB-046 mold releasing agent (moldspatto A-673)	Asahi Glass Co. Ltd.	HCFC- 141b	NA	
	CFC-11*	Changshu 3F Refrigerant Plant	CFC-11		
	CFC-11*	Chemical Industries of Northern Greece SA	CFC-11		
	CFC-11*	Chemicals and Plastics India Ltd.	CFC-11		
	CFC-11*	Firefreeze International	CFC-11		
	CFC-11*	Gujarat Fluorochemicals Ltd	CFC-11		

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
CFC-11*		Hankook Shin Hwa	CFC-11		
CFC-11*		Jiangsu Meilan Electric Chemical Plant	CFC-11		
CFC-11*		Navin Fluorine Industries	CFC-11		
CFC-11*		Roche Chemicals Inc.	CFC-11		
CFC-11*		Spolek	CFC-11		
CFC-11*		Suzhou Xinye Chemical Co. Ltd	CFC-11		
CFC-11*		Zhejiang Juhua Group Company	CFC-11		
CFC-11*		Zhejiang Linhai Limin Chemical Plant	CFC-11		
CFC-113		Jiangsu Changshu Yudong Chemical Plant	CFC-113		
CFC-113*		Changshu 3F Refrigerant Plant	CFC-113		
CFC-115*		Changshu 3F Refrigerant Plant	CFC-115		
CFC-115*		Zhejiang Chemical Research Institute	CFC-115		
CFC-12		Jiangsu Meilan Electric Chemical Plant	CFC-12		
CFC-12*		Changshu 3F Refrigerant Plant	CFC-12	R-12	
CFC-12*		Chemicals and Plastics India Ltd.	CFC-12		
CFC-12*		Firefreeze International	CFC-12		
CFC-12*		Fujian Shaowu Fluorchemical Plant	CFC-12		
CFC-12*		Guangdong Zengcheng Xiangsheng Chemical Co. Lt	CFC-12		
CFC-12*		Gujarat Fluorochemicals Ltd	CFC-12		
CFC-12*		Hankook Shin Hwa	CFC-12		
CFC-12*		Navin Fluorine Industries	CFC-12		
CFC-12*		Roche Chemicals Inc.	CFC-12		
CFC-12*		Spolek	CFC-12		
CFC-12*		SRF Limited	CFC-12		
CFC-12*		Zhejiang Dongyang Chemical Plant	CFC-12		
CFC-12*		Zhejiang Juhua Fourochemical Company, Ltd	CFC-12		
CFC-unspecified*		VOCCO	CFC-unspecified		
CG Triflon		Central Glass Co. Ltd.	CFC-113(100)	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Chem-Slich	National Chemsearch America	1,1,1-trichloroethane	NA	
	Chem-Slick	National Chemsearch	1,1,1-trichloroethane	NA	
	Chemlok 252	Lord Corp.	1,1,1-trichloroethane	NA	
	Chemlok 252	Lord Corporation	1,1,1-trichloroethane	NA	
	Chlorothene (R)	Dow	1,1,1-trichloroethane	NA	
	Chlorothene (R) NU	Dow	1,1,1-trichloroethane	NA	
	Chlorothene (R) SL	Dow	1,1,1-trichloroethane	NA	
	Chlorothene (R) SM	Dow	1,1,1-trichloroethane	NA	
	Chlorothene (R) VG	Dow	1,1,1-trichloroethane	NA	
	Chlorothene (R) XL	Dow	1,1,1-trichloroethane	NA	
	CRC Lectra Clean	CRC Chemicals Australia	1,1,1-trichloroethane	NA	
	CRC Lectra Clean	CRC Chemicals Australia Pty.	1,1,1-trichloroethane	NA	
	CRC226	CRC Chemicals Australia	1,1,1-trichloroethane	NA	
	CRC226	CRC Chemicals Australia Pty.	1,1,1-trichloroethane	NA	
	Daiflon 11	Daikin Industries Ltd	CFC-11		Yes
	Daiflon 114	Daikin Industries Ltd	CFC-114		
	Daiflon 115	Daikin Industries Ltd	CFC-115		
	Daiflon 12	Daikin Industries Ltd	CFC-12		Yes
	Daiflon 13	Daikin Industries Ltd	CFC-13		
	Daiflon 142b	Daikin Industries Ltd	HCFC-142b		Yes
	Daiflon 22	Daikin Industries Ltd	HCFC-22		Yes
	Daiflon S3	Daikin Industries Ltd	CFC-113(100)	NA	Yes
	Delifrene 113	Ausimont SPA	CFC-113		
	Dional 11	Solvay Fluor GMBH	CFC-11		Yes
	Dional 113	Solvay Fluor GMBH	CFC-113	NA	Yes
	Dowclene (R) EC-CS	Dow	1,1,1-trichloroethane	NA	
	Dowclene (R) LS	Dow	1,1,1-trichloroethane	NA	
	Dymel 142b	Dupont-Misui Fluorochemicals Co. Ltd.	HCFC-142b		

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Dymel 22	Dupont-Misui Fluorochemicals Co. Ltd.	HCFC-22	NA	
	Electrosolv	Unitor Ships Service	1,1,1-trichloroethane	NA	
	F-113	Tosoh	CFC-113	NA	
	FCC-11	Akzo	CFC-11		
	FCC-12	Akzo	CFC-12		
	FCC-13	Akzo	CFC-13		
	FE-232	Dupont	HCFC-123	NA	
	FE-241	Dupont	HCFC-124	NA	
	Film Cleaning Grade	Dow	1,1,1-trichloroethane	NA	
	Flon Showa 11	Showa Denko K.K.	CFC-11	R-11	Yes
	Flon Showa 114	Showa Denko K.K.	CFC-114	R-114	Yes
	Flon Showa 12	Showa Denko K.K.	CFC-12	R-12	Yes
	Flon Showa 13	Showa Denko K.K.	CFC-13	R-113	Yes
	Flon Showa 22	Showa Denko K.K.	HCFC-22		
	Flon Showa FS-3	Showa Denko K.K.	CFC-113(100)	NA	Yes
	Floron 11	SRF Limited	CFC-11	R-11	
	Floron 12	SRF Limited	CFC-12		
	Floron 22	SRF Limited	HCFC-22		
	Flugene 22	Continental Industries	HCFC-22		
	Flugene 22	Sicno Chemical Industries	HCFC-22		
	Fluorisol	ISC Chemicals	CFC-113	NA	
	Fluorisol	Rhodia Organique Fine Ltd	CFC-113	R-113	
	Forane 11	ATOFINA (formerly Elf Atochem)	CFC-11		
	Forane 113	ATOFINA (formerly Elf Atochem)	CFC-113		
	Forane 114	ATOFINA (formerly Elf Atochem)	CFC-114		
	Forane 115	ATOFINA (formerly Elf Atochem)	CFC-115	R-115	
	Forane 12	ATOFINA (formerly Elf Atochem)	CFC-12	R-12	
	Forane 123	ATOFINA (formerly Elf Atochem)	HCFC-123		

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Forane 13	ATOFINA (formerly Elf Atochem)	CFC-13		
	Forane 141b	ATOFINA (formerly Elf Atochem)	HCFC-141b		
	Forane 142b	ATOFINA (formerly Elf Atochem)	HCFC-142b		
	Forane 142b	ATOFINA (formerly Elf Atochem)	HCFC-142b	R-142B	
	Forane 22	ATOFINA (formerly Elf Atochem)	HCFC-22		
	Formacel S	Dupont-Misui Fluorochemicals Co. Ltd.	HCFC-22		
	Freon PCA	Dupont	CFC-113(100)	NA	Yes
	Freon TF	Dupont	CFC-113(100)	NA	Yes
	Freon TF	Dupont-Misui Fluorochemicals Co. Ltd.	CFC-113(100)	NA	Yes
	Freon-11	Dupont	CFC-11	R-11	Yes
	Freon-114	Dupont	CFC-114	R-114	Yes
	Freon-115	Dupont	CFC-115	R-115	Yes
	Freon-12	Dupont	CFC-12	R-12	Yes
	Freon-13	Dupont	CFC-13	R-13	Yes
	Freon-22	Dupont	HCFC-22	R-22	Yes
	Frigen 11	Solvay Fluor GMBH	CFC-11		Yes
	Frigen 113	Solvay Fluor GMBH	CFC-113		Yes
	Frigen 114	Solvay Fluor GMBH	CFC-114		Yes
	Frigen 115	Solvay Fluor GMBH	CFC-115	R-115	Yes
	Frigen 12	Solvay Fluor GMBH	CFC-12		Yes
	Frigen 13	Solvay Fluor GMBH	CFC-13		Yes
	Frigen 22	Solvay Fluor GMBH	HCFC-22		Yes
	Frigen TR 113	Solvay Fluor GMBH	CFC-113	R-113	Yes
	Friogas 12	Galco S.A.	CFC-12		
	Friogas 141b	Galco	HCFC-141b	NA	
	Fronsolve	Asahi Glass Co. Ltd.	CFC-113(100)	NA	
	Fronsolve AD-9	Asahi Glass Co. Ltd.	CFC-113(99.5)	NA	
	Fronsolve R 113	Nagase & Co, Japan	CFC-113	R-113	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	G12	AlliedSignal Fluorochemicals Europe BV, Netherland	CFC-12	R-12	
	Genesolv 2123	Honeywell (formerly Allied-Signal Inc.)	HCFC-123	R-123	
	Genetron 11	Honeywell (formerly Allied-Signal Inc.)	CFC-11	R-11	
	Genetron 113	Honeywell (formerly Allied-Signal Inc.)	CFC-113	R-113	
	Genetron 114	Honeywell (formerly Allied-Signal Inc.)	CFC-114		
	Genetron 115	Honeywell (formerly Allied-Signal Inc.)	CFC-115		
	Genetron 12	Quimbasicos S.A.	CFC-12		
	Genetron 123	Honeywell (formerly Allied-Signal Inc.)	HCFC-123	R-123	
	Genetron 124	Honeywell (formerly Allied-Signal Inc.)	HCFC-124	R-124	
	Genetron 13	Honeywell (formerly Allied-Signal Inc.)	CFC-13		
	Genetron 141b	Honeywell (formerly Allied-Signal Inc.)	HCFC-141b	R-141B	
	Genetron 142b	Honeywell (formerly Allied-Signal Inc.)	HCFC-142b	R-142B	
	Genetron 22	Honeywell (formerly Allied-Signal Inc.)	HCFC-22	R-22	
	Gex	National Chemsearch	1,1,1-trichloroethane	NA	
	GEX	National Chemsearch America	1,1,1-trichloroethane	NA	
	Halon 1211	Hanju Chemical Co.	Halon 1211	NA	
	Halon 1301	Hanju Chemical Co.	Halon 1301	NA	
	Halon-1211*	Dalian Fire-extinguishing Agent Plant	halon-1211	NA	
	Halon-1211*	Foshan Electral-Chemical General Plant	Halon-1211	NA	
	Halon-1211*	Jiangsu Wuxian Chemical Plant	halon-1211	NA	
	Halon-1211*	Navin Fluorine Industries	Halon-1211	NA	
	Halon-1211*	Shandong Shouguang Fire-Extinguishing Agent Plant	Halon-1211	NA	
	Halon-1211*	Zhejiang Chemical Research Institute	halon-1211	NA	
	Halon-1211*	Zhejiang Dongyang Chemical Plant	halon-1211	NA	
	Halon-1301*	Zhejiang Chemical Industry Research Institute	halon-1301	NA	
	HCFC-123	Especial Gas Inc.	HCFC-123	R-123	
	HCFC-123 Generic	Kanto Denka Kogyo Co.	HCFC-123	NA	
	HCFC-124	InterCool Energy Corporation	HCFC-124		

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	HCFC-141b	Central Glass Co. Ltd.	HCFC-141b		
	HCFC-141b	Daikin Industries Ltd	HCFC-141b		
	HCFC-141b MS	Daikin Industries Ltd	HCFC-141b		
	HCFC-141b*	Roche Chemicals Inc.	HCFC-141b		
	HCFC-142b	Daikin Industries Ltd	HCFC-142b		
	HCFC-142b*	Central Glass CO. Ltd.	HCFC-142b		
	HCFC-142b*	Roche Chemicals Inc.	HCFC-142b		
	HCFC-22	Daikin Industries Ltd	HCFC-22		
	HCFC-22*	Chemical Industries of Northern Greece SA	HCFC-22		
	HCFC-22*	Chemicals and Plastics India Ltd.	HCFC-22		
	HCFC-22*	Firefreeze International	HCFC-22		
	HCFC-22*	Gujarat Fluorochemicals Ltd	HCFC-22		
	HCFC-22*	Hankook Shin Hwa	HCFC-22	NA	
	HCFC-22*	SRF Limited	HCFC-22		
	HCFC-225	Daikin Industries Ltd	HCFC-225		
	HCFC-225 ES	Daikin Industries Ltd	HCFC-225		
	HCFC-unspecified*	VOCCO	HCFC-unspecified		
	ISCEON 11	Rhodia Organique Fine Ltd	CFC-11	R-11	
	ISCEON 113	Rhodia Organique Fine Ltd	CFC-113	R-113	
	ISCEON 114	Rhodia Organique Fine Ltd	CFC-114	R-114	
	ISCEON 115	Rhodia Organique Fine Ltd	CFC-115	R-115	
	ISCEON 12	Rhodia Organique Fine Ltd	CFC-12		
	ISCEON 13	Rhodia Organique Fine Ltd	CFC-13	R-13	
	ISCEON 22	Rhodia Organique Fine Ltd	HCFC-22		
	JS-536B	Chiland Enterprise	1,1,1-trichloroethane	NA	
	JS-536B	Chiland Enterprise	1,1,1-trichloroethane	NA	
	Kaltron	Kali Chemicals	CFC-113	NA	
	Kanden Triethane N	Kanto Denka Kogyo	TCA(100)	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	Korfron 11	Ulsan Chemical Co.	CFC-11	NA	
	Korfron 12	Ulsan Chemical Company	CFC-12	R-11	
	Korfron 141b	Ulsan Chemical Company	HCFC-141b	R-141B	
	Korfron 142b	Ulsan Chemical Company	HCFC-142b	R-142B	
	Korfron 22	Ulsan Chemical Company	HCFC-22	R-22	
	Krylon Dulling Spray	Sherwin Williams Co	1,1,1-trichloroethane	NA	
	Krylon Dulling Spray	Sherwin Williams Co.	1,1,1-trichloroethane	NA	
	Mafron 11	Navim Fluorine Industries	CFC-11		
	Mafron 12	Navim Fluorine Industries	CFC-12		
	Meforex 123	Ausimont SPA	HCFC-123	R-123	
	Meforex 124	Ausimont SPA	HCFC-124	R-124	
	Meforex 141b	Ausimont SPA	HCFC-141b	R-141b	
	Meforex 142b	Ausimont SPA	HCFC-142b	R-142b	
	Meth-O-Gas 100	Great Lakes Chemical	methyl bromide	NA	
	Meth-O-Gas Q	Great Lakes Chemical	methyl bromide	NA	
	Methyl bromide*	Ichikawa Gohsei Chemical CO., Ltd	methyl bromide	NA	
	Methyl bromide*	Asahi Glass Co. Ltd	methyl bromide	NA	
	Methyl bromide*	ATOFINA (formerly Elf Atochem)	methyl bromide	NA	
	Methyl bromide*	Dead Sea Bromine Co., Ltd	methyl bromide	NA	
	Methyl bromide*	Dokai Chemical Industry Co., Ltd	methyl bromide	NA	
	Methyl bromide*	Ethyl Corporation	methyl bromide	NA	
	Methyl bromide*	Nippoh Chemical CO., Ltd	methyl bromide	NA	
	Methyl bromide*	Teijin Chemicals Ltd.	methyl bromide	NA	
	Methyl Chloroform Low Stabilized	Dow	1,1,1-trichloroethane	NA	
	Methyl Chloroform Low Stabilized - PW	Dow	1,1,1-trichloroethane	NA	
	Methyl Chloroform Technical	Dow	1,1,1-trichloroethane	NA	
	Molybkombin UMFT4	Kluber Lubrification	1,1,1-trichloroethane	NA	
	Molybkombin UMFT4 Spray	Kluber Lubrification	1,1,1-trichloroethane	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	MS-136N	Miller Stephenson Chem	1,1,1-trichloroethane	NA	
	MV3	Rocol Ltd.	1,1,1-trichloroethane	NA	
	NC-123	National Chemsearch	1,1,1-trichloroethane	NA	
	NC-123	National Chemsearch America	1,1,1-trichloroethane	NA	
	New Dine T	Yokoyama	1,1,1-trichloroethane	NA	
	Nicrobraz Cement 500RTS	Wall Colmonoy	1,1,1-trichloroethane	NA	
	Nicrobraz Cement xxx	Wall Colmonoy	1,1,1-trichloroethane	NA	
	Nilos Solution TLT70	Nilos Hans Ziller KG	1,1,1-trichloroethane	NA	
	Norchem ACC 572	Goldcrest International	1,1,1-trichloroethane	NA	
	PC81x	Multicore Solders	1,1,1-trichloroethane	NA	
	Polioi Poliuretano ICI	ICI	HCFC-141b	R-141B	
	Prelete*(R)	Dow	1,1,1-trichloroethane	NA	
	Proact* (R)	Dow	1,1,1-trichloroethane	NA	
	Rust Inhibitor No. B007	Crown Industrial Products	1,1,1-trichloroethane	NA	
	Rust Inhibitor B007	Crown Industrial Prods	1,1,1-trichloroethane	NA	
	S.E.M.I. Grade	Dow	1,1,1-trichloroethane	NA	
	Safety Solvent 8060	Crown Industrial Prods	1,1,1-trichloroethane	NA	
	Safety Solvent No. 8060	Crown Industrial Products	1,1,1-trichloroethane	NA	
	Shine Pearl	Toagosei Chemical	1,1,1-trichloroethane	NA	
	Sienkatanso	Kanto Denka Kogyo Co.	CTC	NA	
	Solkane 123	Solvay Fluor GMBH	HCFC-123	R-123	
	Solkane 141b	Solvay Fluor GMBH	HCFC-141b	NA	
	Solkane 141b CN	Solvay Fluor GMBH	HCFC-141b		
	Solkane 142b	Solvay Fluor GMBH	HCFC-142b	NA	
	Solkane 22	Solvay Fluor GMBH	HCFC-22		
	Solkane 22	Solvay Fluor GMBH	HCFC-22	R-22	
	Solvent Cleaner/Degreas. C60	Sprayway Inc	1,1,1-trichloroethane	NA	
	SonicSolve	Lonco	CFC-113	NA	

Type	Trade name	Company	Composition	ASHRAE	Product discontinued
	SonicSolve xxx	Lonco	1,1,1-trichloroethane	NA	
	SS-25	National Chemsearch America	1,1,1-trichloroethane	NA	
	Sunlovely	National Chemsearch	1,1,1-trichloroethane	NA	
	Super solution	Pang Rubber Company	1,1,1-trichloroethane	NA	
	Suva 123	Dupont	HCFC-123	R-123	
	Suva 124	Dupont	HCFC-124	R-124	
	Suva 125	Dupont	HFC-125	R-125	
	Swish	National Chemsearch	1,1,1-trichloroethane	NA	
	Swish	National Chemsearch America	1,1,1-trichloroethane	NA	
	Taisoton 12	Formosa Plastics	CFC-12	NA	
	Taisoton 22	Formosa Plastics	HCFC-22	NA	
	TCTFE	Solvay Fluor GMBH	R-113 (for feedstock use)	NA	
	Tempilaq	Tempil Division	1,1,1-trichloroethane	NA	
	Terr-O-Gas	Great Lakes Chemical	methyl bromide	NA	
	Three Bond 1802	Three Bond Technologies	1,1,1-trichloroethane	NA	
	Three Bond xxx	Three Bond Tec(s)	1,1,1-trichloroethane	NA	
	Three one	Toagosei Co.	1,1,1-trichloroethane	NA	
	Tipp-Ex	Toagosei Co.	1,1,1-trichloroethane	NA	
	Toyoclean	Tosoh	1,1,1-trichloroethane	NA	
	Toyoclean O	Tosoh	TCA(100)	NA	
	Triethane PPG	Tosoh	1,1,1-trichloroethane	NA	
	Vertrel 423	Dupont-Misui Fluorochemicals Co. Ltd.	HCFC-123	NA	