


## INFORMATION PAPER



# **Inventory of Trade Names of Chemical Products Containing Ozone Depleting Substances and their Alternatives**

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**Technology, Industry and Economics**

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## **UPDATES**

The information in this paper represents the trade names known to UNEP DTIE's OzonAction Programme at the time of publication indicated on the cover. Since this paper will be updated on a regular basis, updates and corrections are welcome. Please forward them to:

Mr. Rajendra M. Shende, Chief  
UNEP DTIE Energy and OzonAction Unit  
Tour Mirabeau  
39-43 quai André Citroën  
73759 Paris Cedex 15 France  
Tel: (33-1) 44 37 14 50  
Fax: (33-1) 44 37 14 74  
Email: [ozonaction@unep.fr](mailto:ozonaction@unep.fr)  
[www.uneptie.org/ozonaction](http://www.uneptie.org/ozonaction)

## 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.<sup>1</sup>

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:

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<sup>1</sup> See UNEP's *ODS Import/Export Licensing Systems Resource Module* available at [www.uneptie.org/ozonaction/library/reports/main.html](http://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](http://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 TERMINOLOGY<sup>2</sup>

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 CCl<sub>2</sub>FCClF<sub>2</sub>. Applying the naming convention to the formula, the code becomes:

$$\begin{aligned} X &= 2 - 1 = 1 \quad (\text{Number of carbon atoms} = 2) \\ Y &= 0 + 1 = 1 \quad (\text{Number of hydrogen atoms} = 0) \\ Z &= 3 \quad (\text{Number of fluorine atoms} = 3) \end{aligned}$$

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 Arklone<sup>TM</sup> products are 113-based, the suffix referring to the composition, Arklone<sup>TM</sup> P and P-SM are pure 113, Arklone<sup>TM</sup> E, L, A, F, etc. are blended with other solvents, such as methylene chloride, isopropanol, ethanol, etc.

However, Dupont's Freon<sup>TM</sup> products cover a wider range, including the refrigerants (for example Freon<sup>TM</sup> 11 and Freon<sup>TM</sup> 12). The Dupont 113-based systems have a prefix T (e.g. Freon<sup>TM</sup> 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.

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<sup>2</sup> 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
<b>Non-ODS blend</b>					
	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	CF3CHF3	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 Toatu 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	
	Magidry MD 201	Daikin Industries Ltd	CFC-113(99.5)	NA	Yes
	Magidry MD 202	Daikin Industries Ltd	CFC-113(99.5)	NA	Yes
	Magidry MD 203	Daikin Industries Ltd	CFC-113(99.5)	NA	Yes
	Magidry MD-E35	Daikin Industries Ltd	CFC-113(65)	NA	Yes
	Magidry 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
<b>ODS single component</b>					
	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 Fluorochemical 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 Fourchemical 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	
	Microbraz Cement 500RTS	Wall Colmonoy	1,1,1-trichloroethane	NA	
	Microbraz 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	

# Contacts for Producers

## 3M

Address 3M Center Building  
223-6S-04  
City St. Paul  
State/province MN  
Postal code 55133-3223  
Country United States  
Tel (1)612-736-7569  
Fax (1)612-736-8643  
Email jechorba@mmm.com  
Web

## ADI Technologies, Inc.

Address 1487 Chain Bridge Road  
Suite 304  
City McLean  
State/province VA  
Postal code 22101  
Country United States  
Tel (1)703-734-9626  
Fax (1)703-448-8591  
Email  
Web

## AES International Pty Ltd.

Address 9 Gloucester Road  
P.O. Box 694  
City Hurstville  
State/province NSW  
Postal code 2200  
Country Australia  
Tel (61)2-9586-3200  
Fax (61)2-9586-3211  
Email  
Web

# Contacts for Producers

## Akzo Chemicals International B.V.

Address Stationplein 4  
P.O. Box 247  
City 3800 AE Amersfoort  
State/province  
Postal code  
Country The Netherlands  
Tel  
Fax  
Email  
Web

## Alpha Metals

Address  
  
City  
State/province  
Postal code  
Country  
Tel  
Fax  
Email  
Web

## American Pacific Corporation

Address Halotron, Inc.  
  
City  
State/province  
Postal code  
Country United States  
Tel (1) 702-735-2200  
Fax (1) 702-735-4876  
Email Halotron@APFC.com  
Web

# Contacts for Producers

## **Ansul Fire Protection**

Address 1240 Iroquois Drive, Suite 102

City

State/province

Postal code

Country United States

Tel (1)708-305-5700

Fax (1)708-305-3360

Email [dpelton@tyco.geis.com](mailto:dpelton@tyco.geis.com)

Web

## **Arrow Chemicals**

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## **Asahi Chemical Industry Co. Ltd.**

Address Chemicals Division  
1-2-2, Yuraku-cyo, Chiyoda-ku

City Tokyo 100

State/province

Postal code

Country Japa

Tel 81-3-350702983

Fax 81-3-3507 2375

Email

Web

## Contacts for Producers

### Asahi Glass Co. Ltd.

Address Performance Chemical Division  
Chiyoda-ku  
City Tokyo  
State/province  
Postal code 100  
Country Japan  
Tel (81) 3 3218 5686  
Fax (81) 3 3211 7672  
Email  
Web

### ATOFINA (Elf Atochem)

Address 4, Cours Michelet  
La Defense 10  
City Paris  
State/province  
Postal code Cedex 42  
Country France  
Tel (33) 1 49 00 84 76  
Fax (33) 1 49 00 75 67/70 21  
Email  
Web

### Ausimont K. K

Address Izumi Akasaka bldg.  
Akasaka 2-chome  
City Minato-ku  
State/province Tokyo  
Postal code 107  
Country Japan  
Tel +81-33-2247 226  
Fax +81-33 2247 218  
Email  
Web [www.ausimont.it](http://www.ausimont.it)

# Contacts for Producers

## Ausimont SPA

Address Viale Lombardia 20  
20021 Bollate  
City Milano  
State/province  
Postal code  
Country Italy  
Tel (392 ) 6270 2200  
Fax (392) 6270 2129  
Email  
Web

## Autocool Refrigerants

Address 1725 S Saguaro  
City Messa  
State/province AZ  
Postal code 85202  
Country USA  
Tel (1)480-7778-555  
Fax (1)253-3903-009  
Email  
Web [www.autocool-refrigerants.com](http://www.autocool-refrigerants.com)

## Calor Gas Ltd.

Address Tachbrook Park  
City Warwick  
State/province  
Postal code CV34 6RL  
Country United Kingdom  
Tel  
Fax  
Email [Dcolbour@aclorgas.co.uk](mailto:Dcolbour@aclorgas.co.uk)  
Web

## Contacts for Producers

### Central Glass Co. Ltd.

Address Kowa-Hitotsubashi Bldg.  
3-7-1 Kanda-Nishiki-Cho  
City Chiyoda-Ku  
State/province Tokyo  
Postal code 101  
Country Japan  
Tel (81) 3 3259 7111  
Fax  
Email  
Web

### Changshu 3F Refrigerant Plant

Address Mr.Zhang Pingzhong  
City Changshu  
State/province Jiangsu  
Postal code 215522  
Country China  
Tel 86-520-2621243  
Fax 86-520-2621243  
Email  
Web

### Chem-Tech International

Address 1800 Diagonal Road, Suit 600  
Alesandria  
City  
State/province Virginia 22314  
Postal code  
Country United States  
Tel 1-703-549 1001  
Fax 1--703-549 1003  
Email  
Web

# Contacts for Producers

## Chem-Tek America

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## Chemetall Asia Pte. Ltd. (formerly Brent (Asia) Pte. Ltd.)

Address 12 Loyang Crescent

City Singapore

State/province

Postal code 508980

Country Singapore

Tel (65)543-0122

Fax (65)542-1312

Email

Web

## Chemical Industries of Northern Greece SA

Address P.O.Box 10183  
Thessaloniki

City

State/province

Postal code 54110

Country Greece

Tel

Fax

Email

Web

## Contacts for Producers

### **Chemicals and Plastics India Ltd.**

Address 8, Cathedral Road

City Madras

State/province

Postal code 600 086

Country India

Tel (91) 44 473 333

Fax (91) 44 869 359

Email

Web

### **Chiland Enterprise**

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

### **CRC Chemicals Australia**

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

# Contacts for Producers

## **Crown Industrial Prods**

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## **Daikin Industries Ltd.**

Address Safety, Health and Environment Division

Sensu-shi

City Osaka

State/province

Postal code 566

Country Japan

Tel (81) 6 349 5336

Fax (81) 6 349 2578

Email

Web

## **Dead Sea Bromine Co., Ltd.**

Address 12 Kreuser Street

Makleff House

City

State/province Beer-Sheva

Postal code P.O. Box 180

Country Israel

Tel (11) 9727297828

Fax (11) 9727297832

Email

Web

## Contacts for Producers

### **Dokai Chemical Industry Co., Ltd.**

Address 13-1, Kita-Miantomachi  
Wakamatsu-Ku  
City Kita-Kyushu Shi  
State/province Fukuoka Pref. 808  
Postal code  
Country Japan  
Tel (81) 93 761 1135  
Fax (81) 93 771 6161  
Email  
Web

### **DuPont Fluoroproducts**

Address Chestnut Run Plaza  
City P.O. Box 80702  
State/province Wilmington, DE  
Postal code 19880-0702  
Country United States  
Tel (1)302-999-3287  
Fax (1)302-999-2816  
Email daniel.w.moore@usa.dupont.com  
Web

### **Duracool Ltd.**

Address 10260, 21 Street NW  
City Edmonton  
State/province Alberta  
Postal code T6P 1W4  
Country Canada  
Tel (1)780-4494-777  
Fax (1)780-4494-766  
Email duracool@compusmart.ab.ca  
Web <http://www.duracool.com>

## Contacts for Producers

### **E.I. Du Pont de Nemours & Co. Inc.**

Address Freon Products Division  
1007 Market Street(B-13237)  
City  
State/province Wilmington, DE  
Postal code 19898  
Country United States  
Tel (1) 302 774 6484  
Fax (1) 302 774 8416  
Email  
Web

### **Ethyl Corporation**

Address 1155 15 Street NW  
Suite 611  
City Washington DC  
State/province  
Postal code 20005  
Country United States  
Tel (1) 202 223 4411  
Fax (1) 202 223 1849  
Email  
Web

### **Firefreeze International**

Address 270 Route 46 East  
City Rockaway  
State/province NJ 07866  
Postal code  
Country United States  
Tel (1)201-627-0722  
Fax (1)201-627-2982  
Email  
Web

## Contacts for Producers

### Foshan Electral-Chemical General Plant

Address No.37 Foluo Road

City Foshan

State/province Guangdong

Postal code 528000

Country China

Tel 86-757-2815172

Fax 86-757-2815172

Email

Web

### Frio Industry Argentinas S.A

Address Julio A. Roca 651  
3 P. Sector 8/10

City Buenos Aires

State/province

Postal code 1322

Country Argentina

Tel (541) 349 3474 y 349 3475

Fax (541) 349 3502 y 349 3504

Email

Web

### Fujian Shaowu Fluorchemical Plant

Address Mr. Wang Conghai

City Shaowu

State/province Fujian

Postal code 354001

Country China

Tel 86-599-6655091

Fax 86-599-6655091

Email .

Web

# Contacts for Producers

## Galco

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## Generic

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## Ginge-Kerr as

Address 111, Stamholmen

City Hvidovre

State/province

Postal code DK-2650

Country Denmark

Tel

Fax

Email

Web

# Contacts for Producers

## Goldcrest Intl

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## Great Lakes Chemical Corporation

Address P.O. Box 2200

West Lafayette

City

State/province IN

Postal code 47906

Country United States

Tel (1)317-497-6382

Fax (1)317-463-2849

Email fm-200sales@fm-200.com

Web

## Guangdong Zengcheng Xiangsheng Chemical Co. Ltd.

Address Mr. Ouyang Shiming

City Zengcheng

State/province Guangdong

Postal code 511370

Country China

Tel 86-20-82854060

Fax 86-20-82852815

Email

Web

## Contacts for Producers

### Gujarat Fluorochemicals Ltd.

Address A/6 Connaught Pl

City New Delhi

State/province

Postal code 110 001

Country India

Tel (91) 31 3324245

Fax (91) 31 3325128

Email

Web

### Halotron Incorporated

Address

City Las Vegas

State/province Nevada

Postal code 89109

Country United States

Tel 1-702-735-2200

Fax 1-702-725-4876

Email

Web

### Hankook Shin Hwa

Address Head Office and Plant  
290, Maeam-Dong, Ulsan

City

State/province Kyungnam

Postal code

Country South Korea

Tel (82)75 7011

Fax (82)75 1745

Email

Web

## Contacts for Producers

### Honeywell (formerly Allied-Signal Inc.)

Address

City Morristown  
State/province NJ  
Postal code 07962  
Country United States  
Tel (1)973-455-2000  
Fax (1)973-455-4807  
Email hillel.magid@alliedsignal.com  
Web <http://www.Alliedsignal.com>

### Ichikawa Gohsei Chemical Co., Ltd.

Address 27th FL WBG Maribu West  
2-6 Nakase, Mihama-Ku

City Chiba-Shi  
State/province  
Postal code 261  
Country Japan  
Tel (81) 43 297 0141  
Fax (81) 43 297 0134  
Email  
Web

### ICI

Address P.O. Box 13  
The Heath

City Runcorn  
State/province Cheshire  
Postal code WA7 4QF  
Country United Kingdom  
Tel (44)1 928 513213  
Fax (44)1 928 511418  
Email  
Web <http://www.iciklelea.co.uk>

## Contacts for Producers

### InterCool Energy Corporation

Address 450 Old Niskayuna Road  
Latham  
City  
State/province NY  
Postal code 12100-0461  
Country United States  
Tel (1) 800 555-1442  
Fax  
Email  
Web

### International Management Services Corp.

Address Joseph Brown  
8298 D Old Courthouse Road  
City Vienna  
State/province  
Postal code VA 22182  
Country Austria  
Tel (43) 703-448-4487  
Fax (43) 703-847-5430  
Email  
Web

### ISC Chemicals

Address  
City  
State/province  
Postal code  
Country UK  
Tel  
Fax  
Email  
Web

## Contacts for Producers

### Jiangsu Changshu Yudong Chemical Plant

Address Mr. Yan Weixing

City Changshu

State/province Jiangsu

Postal code 215519

Country China

Tel 86-520-2561256

Fax 86-520-2561808

Email

Web

### Jiangsu Meilan Electric Chemical Plant

Address Mr. Zhou Huhong

City

State/province Jiangsu

Postal code 225300

Country China

Tel 86-523-6552276

Fax 86-523-6552323

Email

Web

### Jiangsu Wuxian Chemical Plant

Address Xikuangta Mudu

City Suzhou

State/province Jiangsu

Postal code 215101

Country China

Tel 86-512-6262314

Fax 86-512-6262360

Email

Web

# Contacts for Producers

## **Kali Chemicals**

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## **Kanto Denka Kogyo Co.**

Address Tokyo Kaijo Bldg.  
1-2-1, Marunouchi Chiyoda-ku

City Tokyo

State/province 100

Postal code

Country Japan

Tel 81-3-3216-4563

Fax 81-3-3216-458

Email

Web

## **Kluber Lubrification**

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## Contacts for Producers

### **Kureha Chemical Industry Co., Ltd.**

Address 1-9-11, Nihonbashi Horidome-cyo  
Cyou-ku  
City Tokyo  
State/province 103  
Postal code  
Country Japan  
Tel  
Fax 81-3-32494672  
Email 81-3-3249 4605  
Web

### **Lonco**

Address  
City  
State/province  
Postal code  
Country  
Tel  
Fax  
Email  
Web

### **Lord Corp.**

Address Chemical Products Division Headquarters  
111 Lord Drive  
City Cary  
State/province NC  
Postal code 27512-8012  
Country USA  
Tel (1)919-468-5980  
Fax (1)919-469-5923  
Email  
Web [www.lord.com](http://www.lord.com)

## Contacts for Producers

### McMullen Oil Products Inc.

Address P.O. Box 17357  
11965 49th Street North  
City Clearwater  
State/province Florida  
Postal code 34622-0357  
Country United States  
Tel 1-813 573 0016  
Fax 1-813 573 2327  
Email  
Web

### Micro Care Corp

Address 34 Ronzo Rd  
City Bristol  
State/province CT  
Postal code 06010  
Country United States  
Tel 1-203-585 7912  
Fax 1-203-585 7378  
Email  
Web

### Microcircuit Engineering Corporation

Address P.O. Box 570  
192 Rancocas Road  
City Mount Holly  
State/province New Jersey  
Postal code 08060  
Country the United States  
Tel +1-609-2622 400  
Fax +1- 609-2611 679  
Email salesmec@aol.com  
Web [www.microcircuit.com/solvent.ht](http://www.microcircuit.com/solvent.ht)

# Contacts for Producers

## Miller Stephenson Chem

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## Minimax GmbH

Address Wolfgang Koch

Industriestrasse 10/12

City Bad Oldesloe

State/province

Postal code 23840

Country Germany

Tel (49) 4531-803443

Fax (49) 4531-803500

Email

Web

## Mitsui Toatsu Chemicals Inc.

Address Industrial Chemicals Sales Department

3-2-5 kasumigaseki Chiyoda-ku

City Tokyo

State/province 100

Postal code

Country Japan

Tel 81-3-3592 4529

Fax 81-3-3592 4280

Email

Web

## Contacts for Producers

### Montefluos S.P.A.

Address Ausimont  
44 Whippany Road  
City Morristown  
State/province NJ  
Postal code 07960  
Country USA  
Tel (1)201-292-6250  
Fax (1)201-292-6250  
Email  
Web

### Multicore Solders

Address  
City  
State/province  
Postal code  
Country  
Tel  
Fax  
Email  
Web

### Multron Systems Pte. Ltd.

Address Block 3014A  
Ubi Road 1, # 04-07  
City Kampong Ubi Ind. Est  
State/province  
Postal code 408703  
Country Singapore  
Tel (65)7432-555  
Fax (65)7432-777  
Email multron@singnet.com.sg  
Web <http://www.multron.com>

# Contacts for Producers

## National Chemsearch

Address 245 Orena Road  
City Brampton  
State/province Ontario  
Postal code L6T 1E7  
Country Canada  
Tel (1)905-457-5220  
Fax  
Email  
Web

## Navin Fluorine Industries

Address Mafatlal Centre  
Nariman Point  
City Bombay  
State/province  
Postal code 400 021  
Country India  
Tel (91) 22 202 4547  
Fax (91) 22 202 7856  
Email  
Web

## Newhouse International, Inc.

Address HTL/KinTech Division 111  
Bayshore Avenue  
City Long Beach  
State/province CA  
Postal code 90803  
Country United States  
Tel (1)562-987-1948  
Fax (1)562-930-0329  
Email 102052.2254@compuserve.com  
Web

## Contacts for Producers

### **Nilos Hans Ziller-KG**

Address P.O. Box 970  
Reischolzstr. 15  
City Hilden  
State/province  
Postal code 40721  
Country Germany  
Tel (49)2103-951-215  
Fax (49)2103-951-219  
Email  
Web

### **Nippoh Chemical Co., Ltd.**

Address 3-3-3, Muromachi  
Nihonbashi, Chuo-Ku  
City  
State/province  
Postal code 103  
Country Japan  
Tel (81) 3 3270 5341  
Fax (81) 3246 0346  
Email  
Web

### **North American Fire Guardian**

Address Elio Guglielmi 700 West Pender Street  
Suite 304  
City Vancouver  
State/province BC  
Postal code V6C1G8  
Country Canada  
Tel (1)604-684-7374  
Fax (1)604-684-7415  
Email [naftg@hostec.com](mailto:naftg@hostec.com)  
Web

## Contacts for Producers

### **OZ Technology, Inc.**

Address E. 6552 Seltice Way  
City Post Falls  
State/province Idaho  
Postal code 83854  
Country United States  
Tel 1-208-664 6196  
Fax 1-208-765 8443  
Email  
Web

### **Pang Rubber Co.**

Address  
City  
State/province  
Postal code  
Country United States  
Tel  
Fax  
Email  
Web

### **Postfach 220**

Address  
City Hannover  
State/province  
Postal code 30002  
Country Germany  
Tel 49-511-857 2653  
Fax 49-511-857 2166  
Email  
Web

## Contacts for Producers

### **Powsus Inc.**

Address Harry Stewart  
1178 Wisteria Drive  
City Malvern  
State/province PA  
Postal code 19355  
Country United States  
Tel 1-610-647 2267  
Fax 1-610-648 0793  
Email  
Web

### **Primex Aerospace Co.**

Address 11441 Willows Road, NE  
City Redmond  
State/province WA  
Postal code 98073-9709  
Country United States  
Tel (1)206-885-5000  
Fax (1)206-882-5747  
Email [jdw@redm.primextech.com](mailto:jdw@redm.primextech.com)  
Web

### **Quimbasicos S.A. de C.V.**

Address  
City  
State/province  
Postal code  
Country Mexico  
Tel  
Fax  
Email  
Web

## Contacts for Producers

### **Rhodia Ltd.**

Address St Andrews Road  
Avonmouth  
City Bristol BS11 9HP  
State/province  
Postal code  
Country United Kingdom  
Tel (44) 0117 9484242  
Fax (44) 0117 9484252  
Email  
Web

### **Rhodia Organique Fine Ltd.**

Address ISCEON & HF  
St Andrews Road, PO Box 46  
City  
State/province Avonmouth Bristol  
Postal code BS11 YF  
Country United Kingdom  
Tel 44-0117-9484175  
Fax 44-0117-9484252  
Email  
Web

### **Riedelde Haen AG.**

Address  
City  
State/province  
Postal code  
Country Germany  
Tel  
Fax  
Email  
Web

## Contacts for Producers

### Roche Chemicals Inc.

Address Fluorocarbons Airline Hwy P.O. Box 1031

City Baton Rouge

State/province LA

Postal code 70821

Country United States

Tel (1) 504 356 8487

Fax (1) 504 356 8595

Email

Web

### Rocol Limited

Address

City

State/province

Postal code

Country United Kingdom

Tel

Fax

Email

Web

### Safety Hi-Tech

Address Viale Gino Cervi, 14

City Rome

State/province

Postal code 00139

Country Italy

Tel 39-6-871 344 21

Fax 39-6-871 344 26

Email

Web

## Contacts for Producers

### Shandong Shouguang Fire-Extinguishing Agent Plant

Address Diajiawa

City Shouguang

State/province Shandong

Postal code 262737

Country China

Tel 86-536-5331657

Fax 86-536-5331659

Email

Web

### Sherwin Williams Co

Address Architectural, OEP Product Finishes & Industrial Maintenance Products Lines

City

State/province

Postal code

Country USA

Tel

Fax (1)216-566-3186

Email jsbaldado@sherwin.com

Web

### Showa Denko K.K.

Address Gases & Chemicals Division  
1-13-9 Shiba Daimon Minato-ku

City Tokyo

State/province

Postal code 105

Country Japan

Tel (81) 3 5470 3166

Fax (81) 3 3433 2555

Email

Web

## Contacts for Producers

### Sicno Chemical Industries of Northern Greece

Address S.A. Healenic

City

State/province

Postal code

Country Greece

Tel

Fax

Email

Web

### Solvay Fluor GMBH

Address Postlach 220

City Hannover

State/province

Postal code D-30002

Country Germany

Tel (49)0511 8572653

Fax (49) 0511 8572166

Email

Web <http://www.solvay-fluor.com>

### Spolek

Address

City

State/province

Postal code

Country Czech Republic

Tel (1) 202 473 6010

Fax (1) 202 676 0483

Email

Web

# Contacts for Producers

## Sprayway Inc

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## Sprayway, Inc.

Address Brian L. Tacket

484 Vista Ave

City

State/province IL

Postal code 60101-4468

Country United States

Tel

Fax 1-708-543 7797

Email

Web

## SRF Limited

Address Chemical Business Group  
Express building, 9-10, Bahadur Shah Zafar Marg

City New Delhi

State/province

Postal code 110 002

Country India

Tel (91) 11 331 8155

Fax (91) 11 332 4052

Email

Web <http://www.srf-limited.com>

## Contacts for Producers

### **Suzhou Xinye Chemical Co. Ltd.**

Address Mr. Xu Yueping

City Suzhou

State/province Jiangsu

Postal code 215004

Country China

Tel 85-512-8281688

Fax 86-512-8281988

Email

Web

### **Teijin Chemicals Ltd.**

Address 1-6-21 Nishi Shinbanchi  
Minatoku

City Tokyo

State/province

Postal code 105

Country Japan

Tel (81) 3 3506 47 07

Fax (81) 3 3508 95 28

Email

Web

### **Tempil Division Big Three Industries Inc.**

Address

City

State/province

Postal code

Country United States

Tel

Fax

Email

Web

## Contacts for Producers

### The Sherwilliams Co.

Address

City

State/province

Postal code

Country United States

Tel

Fax

Email

Web

### Three Bond Tec(s)

Address

City

State/province

Postal code

Country Singapore

Tel

Fax

Email

Web

### Toagosei Chemical

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

# Contacts for Producers

## Toagosei Co.

Address Chlorine & Alkali Products Division  
1-14-1, Nishi-Shinbashi  
City Minato-ku  
State/province Tokyo 105  
Postal code  
Country Japan  
Tel 81-3-3585 9891/31  
Fax 81-3-3588 8120  
Email  
Web

## Tosoh

Address  
City  
State/province  
Postal code  
Country  
Tel  
Fax  
Email  
Web

## Ulsan Chemical Co., Ltd.

Address 290 Maeam-dong  
Nam-gu  
City Ulsan  
State/province  
Postal code  
Country Korea  
Tel (82)52-261-7011  
Fax (82)52-260-1861  
Email  
Web

# Contacts for Producers

## Unitor Ships Service

Address A.S. Norway  
Wall Colmonoy Ltd.  
City  
State/province  
Postal code  
Country United Kingdom  
Tel  
Fax  
Email  
Web

## VOCCO

Address  
City  
State/province  
Postal code  
Country Russian Republic  
Tel  
Fax  
Email  
Web

## Vulcan Chemicals

Address  
City  
State/province  
Postal code  
Country  
Tel  
Fax  
Email  
Web

# Contacts for Producers

## Wall Colmonoy

Address

City

State/province

Postal code

Country

Tel

Fax

Email

Web

## Yokohama Polymer Co., Ltd.

Address

City

State/province

Postal code

Country Japan

Tel

Fax

Email

Web

## Zhejiang Chemical Industry Research Institute

Address Experimental Plant  
Beidaqiao Moguanshan Road

City Hangzhou

State/province Zhejiang

Postal code 310011

Country China

Tel 86-571-8091351

Fax 86-571-8091406

Email

Web

# Contacts for Producers

## Zhejiang Chemical Research Institute

Address Mr. Cheng Mai

City Hangzhou

State/province Zhejiang

Postal code 310023

Country China

Tel 86-571-5229414

Fax 86-571-5229858

Email

Web

## Zhejiang Dongyang Chemical Plant

Address Mr. Wang TianE  
Ningwudong Road

City Dongyang

State/province Zhejiang

Postal code 322100

Country China

Tel 86-579-6633201

Fax 86-10-6632697

Email

Web

## Zhejiang Fire-fighting Chemical Plant

Address Guanzhui

City Quzhou

State/province Zhejiang

Postal code 32400

Country China

Tel 86-570-3061560

Fax 86-570-3096504

Email

Web

## Contacts for Producers

### Zhejiang Juhua Fluorchemical Co. Ltd.

Address Mt. Tang Yueming

City Quzhou

State/province Zhejiang

Postal code 324004

Country China

Tel (86 570)3096798

Fax (86 570)3066928

Email

Web

### Zhejiang Linhai Limin Chemical Plant

Address Mr. He Futing

City Linhai

State/province Zhejiang

Postal code 31700

Country China

Tel 86-576-5111092

Fax 86-576-5197058

Email

Web