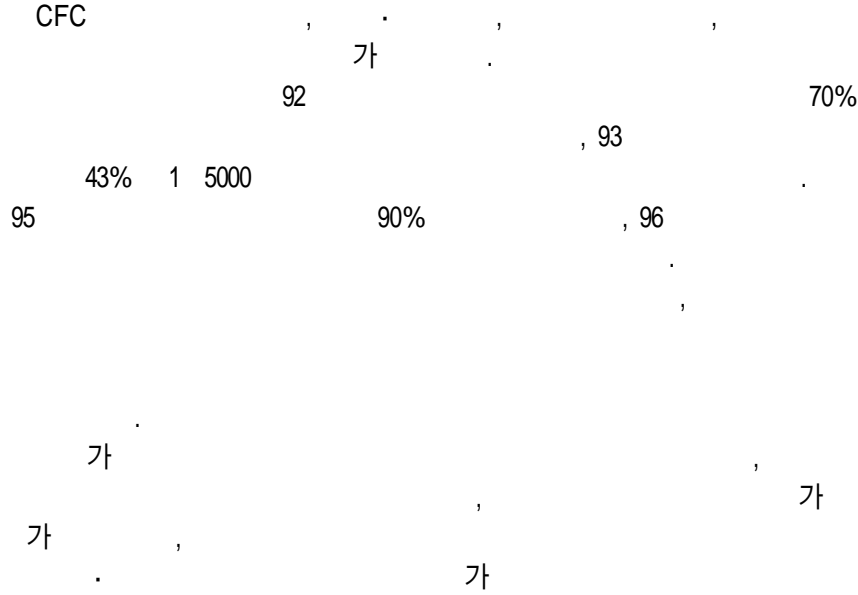


<Inorganic Chemicals>

# CFC



CFC

( : 100 )

	1991	1992	1993	1994	1995	1996	
HFC-125	-	-	80	60	220	160	520
(KIST)	144	125	160	60	150	370	1,009
	29	125	160	60	150	370	894
	173	250	400	180	520	900	2,423
HFC-134a	-	-	160	300	260	-	720
(KIST)	239	250	320	350	270	-	1,429
	29	250	320	350	270	-	1,219
	268	500	800	1,000	800	-	3,368
HFC-152a	-	-	80	120	180	-	380
(KIST)	-	100	160	240	110	-	610
	-	100	160	240	110	-	610
	-	200	400	600	400	-	1,600
HCFC-141b/142b	-	-	-	-	-	-	-
(KIST)	230	-	-	-	-	-	230
	30	-	-	-	-	-	30
	260	-	-	-	-	-	260
HCFC-141b/142b	-	304	-	76	-	-	380
( )	-	-	-	-	-	-	-
	510	888	-	222	-	-	1,620
	510	1,192	-	298	-	-	2,000
	-	304	320	556	660	160	2,000
	613	475	640	650	530	370	3,278
	598	1,363	640	872	530	370	4,373
	1,211	2,142	1,600	2,078	1,720	900	9,651

CFC	CFC	가 10
94 7 5 1	10 CFC	가 2005 2003
1 0.3kg 1 2000	7 8 94 5	93 CFC
10 가 1 0.294kg	5 1	
10 1 0.3kg	CFC CFC 2005	2003 95
CFC 5 1	CFC	
96 가 OECD 가 CFC	가	가 가
CFC 400	CFC	4
3 CFC	CFC	
Difluoro(fluoromethoxy)methane(C <sub>2</sub> H <sub>3</sub> F <sub>3</sub> O)		
Hexafluorocyclopropane(C <sub>3</sub> F <sub>6</sub> ; FC-C216)		CFC
Oxybis(difluoro)methane(C <sub>2</sub> H <sub>2</sub> F <sub>4</sub> O)		
Trifluoroiodomethane(CF <sub>3</sub> I)		
Dichloro(difluoromethoxy)methane(C <sub>2</sub> HCl <sub>2</sub> F <sub>3</sub> O)		
HFC-32	Du Pont, ICI	
Bis(difluoromethyl) Ether(E-134)	W.R.Grace	
HFC-227(CHF <sub>2</sub> CF <sub>2</sub> CF <sub>3</sub> )		
RC-216(perfluorocyclopropane)		
Perfluoro-1,2-dimethylcyclobutane(C-51-12)	Du Pont	
Pentafluoropropanol(5FP)	Daikin	
m-Xylenehexafluoride		
Prozone(alcohols and glycol ethers)	BP Chem.	CFC
1,1,1,4,4,4-hexafluorobutane(HFC-356)	Bayer	
Isopropylchloride(IPC)	Recticel	CFC가 가 가
Saturated halocarbons		
Oxygenated and Unsaturated Halocarbons		
Iodides		
Phosphorous Compounds		
Sulfur Halides		
Metallics		
Carbon Analogs		

가 HCFC-22가 가  
 HCFC-22 CFC-12 HCFC-22  
 CFC-12 5 가  
 가 가  
 CFC-12 10 가 가  
 가 가 HCFC-  
 22/HCFC- 142b CFC-12 가  
 가 CFC CFC  
 가 CFC CFC  
 Carbon) CFC-11 가 HCFC(Hydro Chloro Fluoro  
 CFC  
 가 HFC(Hydro Fluoro Carbon)  
 HCFC HFC가 CFC  
 가 HCFC CFC  
 가

CFC-11/12	- , ( ) Grade • HFC-134a ( , ) - CFC ( ) ( )	- HCFC-141b/142b, HCFC-22, HIFC, , CO, © 가 • HCFC-141b/142b, CO ©가 • MC 가 (가 ) - HFC-134a HCFC-22 가 • 93 HFC-134a • HFC-134a 95 가 - © 가 -
CFC-113	- 30% • ©	- HCFC-141b, 1,1,1-TCE, MC, • 가
CFC-114	( ) - ( )	- HCFC-124
CFC-115	( ) - ( )	- HCFC Blend, HFC
Halon	- ,	- , CO <sub>2</sub> , 가 Halon

CFC 1 , 2  
 , 1 CFC  
 3 CFC  
 2 CFC 가  
 3 CFC

( : M/T)

	1986	1987	1988	1989	1990	1991	1992	1993
CFC-11	-	2,136	3,396	3,106	2,075	6,350	5,880	4,984
	4,405	6,085	4,392	10,327	3,313	7,041	4,179	85
( )	4,405	8,221	7,788	13,433	5,388	13,391	10,599	5,069
CFC-12	1,405	2,941	3,177	5,143	4,771	5,862	3,806	3,523
	340	343	117	599	384	2,518	1,830	11
( )	1,745	3,284	3,294	5,742	5,155	8,380	5,636	3,534
CFC-113	-	-	-	-	62	61	-	-
	2,842	4,476	4,927	6,247	5,435	5,824	4,514	2,150
( )	2,842	4,476	4,927	6,247	5,497	5,885	4,514	2,150
	(2,273)	(3,581)	(3,942)	(4,998)	(4,434)	(4,708)	(3,611)	(1,720)
CFC-114/115	105	114	160	273	163	158	100	41
	1,405	5,077	6,573	8,249	6,919	12,273	9,686	8,507
	7,692	11,018	9,596	17,446	9,284	15,541	11,163	2,287
	9,097	16,095	16,169	25,695	16,203	27,814	20,849	10,794
	(8,528)	(15,200)	(15,184)	(24,446)	(15,140)	(26,637)	(19,946)	(10,352)
Halon-1211	-	-	-	-	-	-	-	157
	42	80	74	84	110	245	84	23
	(126)	(240)	(222)	(252)	(330)	(735)	(252)	(540)
Halon-1301	-	-	-	-	-	69	305	228
	281	307	335	367	414	612	417	
( )	281	307	335	367	414	681	722	228
	(2,810)	(3,070)	(3,350)	(3,670)	(4,140)	(6,810)	(7,220)	(2,070)
	-	-	-	-	-	69	305	385
	323	387	409	451	524	857	501	23
	323	387	409	451	524	926	806	408
	(2,936)	(3,310)	(3,572)	(3,922)	(4,470)	(7,545)	(7,472)	(2,610)
	9,420	16,482	16,5278	26,146	16,727	28,740	21,655	11,202
	(11,464)	(18,510)	(18,756)	(28,368)	(19,610)	(34,182)	(27,418)	(12,962)

( )

가

-

3 Fluorinated Aromatics,  
 Fluorinated Ester, Fluorinated Cyclics, Fluorinated Polyethers, 3C Halocarbons, Mixtures

CFC 50%

CFC , 87 7082 , 가 3541  
가 1770 1 6095 , 88 7288 , 3563 ,  
2915 , 1943 , 486 1 6195  
89 8717 , 5617 , 4649 , 387 , 194 1 9370

90 89 6006 2 2186  
1 206 , 6212 , 5324 , 444 , 222 CFC 91  
가 2 7814 , 1 3073 , 8066 ,  
5841 , 556 , 278 . 92 1 1000 1 6894  
가 8109 , 5237 , 3379 , 169 , 17

91 53% CFC  
16% 가 90 30% 91  
87 88 22% 89 29% 가 가 90 18%, 91  
14% 87 11%, 88 12%, 89 9% 90 2%

91 2% 가 가

95 CFC  
CFC 가  
CFC 3가  
CFC

CFC

CFC 가 CFC

CFC CFC

가 가 CFC CFC

CFC 가 CFC

가 CFC

가 가 ,

CFC CFC 가

가

가 가 CFC CFC-11,12 CFC-11,

CFC-113 , , , 가

CFC가 , , , 가



CFC-12 90 5155 91 8380 가 92  
5636 , 93 3534 . 90 4771 , 384 , 91 5862 , 2518  
, 92 3806 , 1830 , 93 3523 , 11 .  
CFC-113 90 62 91 61 90 5435 , 91 5824 ,  
92 4514 , 93 2150 .  
CFC-114/115 90 163 , 91 158 , 92 100 , 93  
41 .  
90 91 69 , 92 305 , 93 385  
, 86 323 , 87 388 , 88 409 , 89 451 , 90 524 , 91 857  
92 501 , 93 23 .  
, -1211 93 157  
86 42 , 87 80 , 88 74 , 89 84 , 90 110 , 91 245 , 92 84 , 93  
23 가  
-1301 91 가 69 , 92 305 , 93 228  
, 86 281 , 87 307 , 88 335 , 89 367 , 90 414 , 91 612 , 92 417  
. 93  
CFC HCFC HFC 92 HCFC-141b/HCFC-142b 27 ,  
HCFC-123 7 , HFC-134a 7 , 93 HCFC-141b 313 , HCFC-142b 58 ,  
HCFC-123 54 , HFC-134a 600 , 94 1 7 HCFC-141b 676 (191  
5850 ) , HCFC-142b 44.3 (11 5380 ) , HCFC-123 21 (14 6930 ) , HFC-134a 730 (404  
6146 )  
가 (94 7 ) HCFC-141b 2834 , HCFC-142b 3507 , HCFC-123 7000  
, HFC-134a 5542 .

( : )				( : M/T)					
	1994	1995	(%)		1994	1995	1996	1997	1998
CFC-11	4,554	4,605	101.1	CFC CFC-11	4,200	2,900	2,000	900	600
-12	418	277	66.3	CFC-12	3,200	2,200	1,600	1,200	1,000
	4,972	4,882	98.2		7,400	5,100	3,600	2,100	1,600
CFC-11	485	434	89.5	HCFC-134a	1,100	2,100	2,800	3,400	3,700
-12	3,205	3,347	104.4	HCFC-141b	1,100	2,300	3,400	4,400	5,000
-114	10	10	100.0	HCFC-142b	50	150	250	300	350
-115	38	38	100.0	HCFC-123	20	70	150	200	300
	3,738	3,829	102.4	HCFC-22	6,100	6,600	7,000	7,150	7,300
CFC-113	1,288	1,132	87.9		8,370	11,220	13,600	15,450	16,650
CFC-11	86	86	100.0						
-12	61	56	91.8						
-114	2	1	50.0						
	149	143	96.0						
	10,147	9,986	98.4						
Halón-1211	445	450	101.1						
-1301	2,625	2,650	101.0						
	3,070	3,100	101.0						
	13,217	13,086	99.0						
	-	369	-						

95  
 95  
 95  
 , 94  
 A 1 3086  
 CFC 가  
 1 0.3kg , 94 1 0.297kg, 95  
 1 0.292kg 1 3086 369  
 A CFC 가 가 95 94  
 119 가 1 3455 , 95 94  
 B CFC-13, , 1,1,1-TCE 95 8970  
 2265 94 95  
 가 ,  
 94 1100  
 95 , CFC-11/12 94  
 94  
 CFC-113 94 94 , CFC-114/ 115 가  
 가 94 95  
 가  
 CFC-13, , 1,1,1-TCE 95  
 95 가 가 가 (CFC-11/12, -  
 1211/1301) 가 , 가 가  
 94~98 CFC , CFC-11 94 4200 , 95 2900 , 96 2000 , 97 900 ,  
 98 600  
 CFC-12 94 3200 , 95 2200 , 96 1600 , 97 1200 , 98 1000 가  
 CFC 94~98 가 , HFC-134a  
 94 110 , 95 2100 , 96 2800 , 97 3400 , 98 3700  
 HCFC-141b 94 1100 , 95 2300 , 96 3400 , 97 4400 , 98 5000 가  
 HCFC-141b 3000  
 , 96 3000  
 CFC-11/12 95  
 HCFC-142b 94 50 , 95 150 , 96 250 , 97 300 , 98 350 ,  
 HCFC-123 94 20 , 95 70 , 96 150 , 97 200 , 98 300



CFC 가 가 HCFC-22 94 6100 , 95 6600 , 96 7000 , 97 7150  
, 98 7300 .

HCFC-22 HFC-32  
HFC-32 가  
HCFC- 22 가 ,

, 7500 HCFC-22 4500  
HFC-32 ,

, HCFC-22 UNEP 96 가 2030 Dupont,  
Allied Signal, ICI HFC-32 .

< 1995/2/15>