

<HCFC-122a>

“ ”

가
 6 가
 6 14
 (CFC)
 96 1 1
 CFC (HCFC) 가
 , 95
 CFC-113 1,1,1-TCE(Tri Chloro Ethane Methyl Chloro Forum)
 HCFC-122a

【 1】 (: , mmHg, %)

			UF ₆ ()		
HCFC-122a	200	-20	1.08	87	1
			1.07	83	
			1.01	78	
HCFC-132c	150	-20	1.07	58	%
HCFC-142a	120	-20	1.06	53	
HCF-134a	350	-20	1.06	37	가
	300	-20	1.20	60	
HFC-152	100	-20	1.08	35	

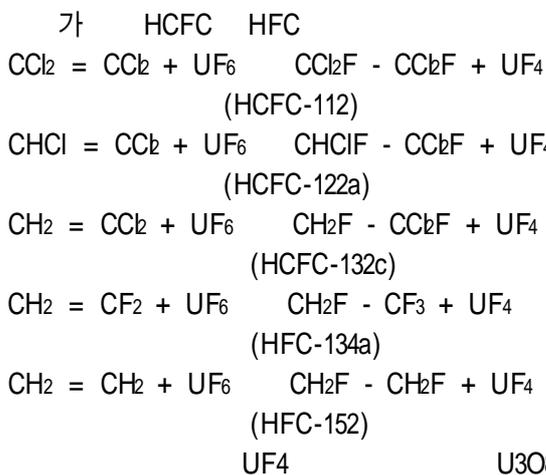
UF₆ 가
 U235

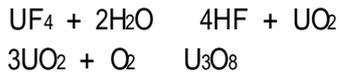
U235가 0.72%
 U238 U234
 U235 가 3%
 U235 가

HCFC(Hydrochloro-fluorocarbon) HFC(Hydrofluorocarbon)
 HCFC-122a

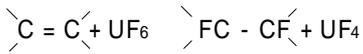
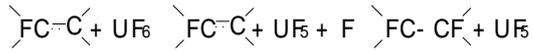
UF₆ HCFC HFC

HCFC-122a





UF_6
 U_3O_8 가 UF_6 가가
 HCFC HFC U_3O_8
 HCFC-112 HF Cl F CFC-113



2 F가

HF

가

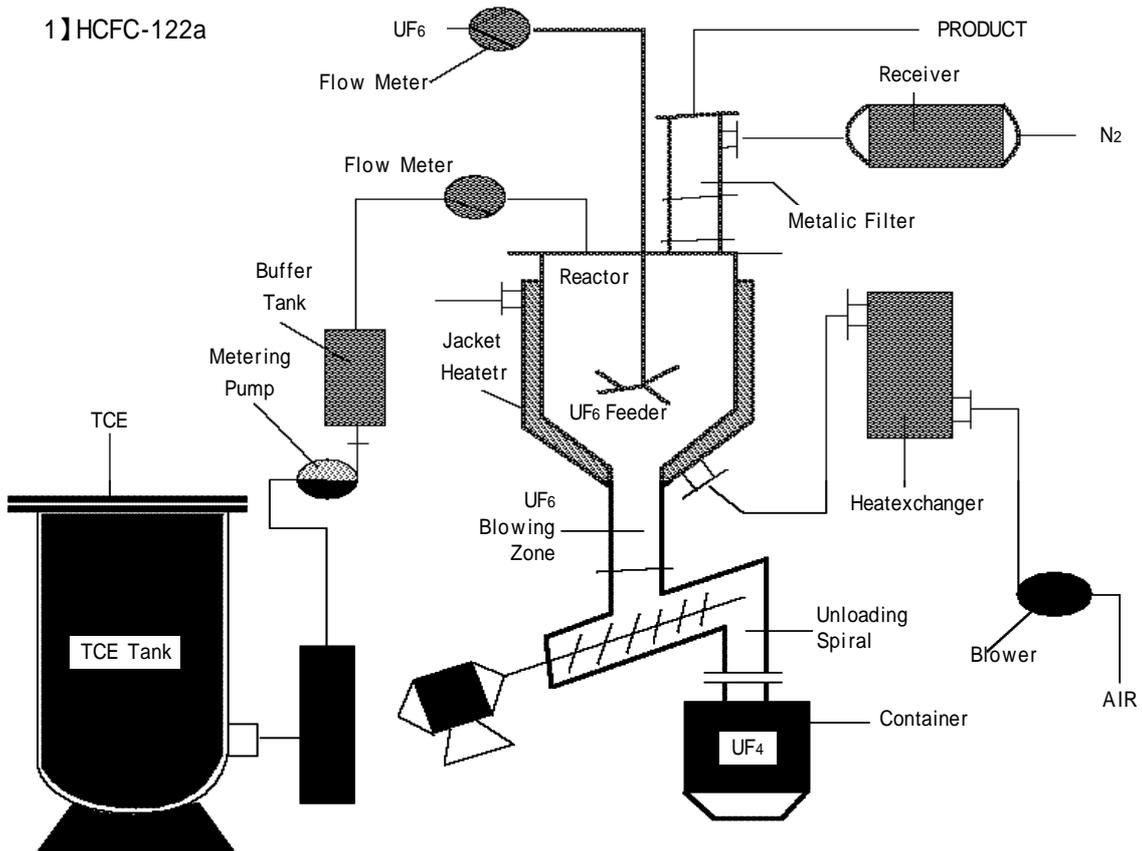
2 가

【 1】 HCFC-122a, HCFC-132c, HCFC-142a, HFC-134a, HFC-152

UF_6 UF_4 가
 20mmHg HCFC-122a
 100%

1,1,2-Trichloro-1,2-difluoroethane HCFC-122a CHClF-CCl2F
 169.39g/mol, 25 1.549g/cm³ 25 0.752c.p

【 1】HCFC-122a



760mmHg 72 , -174 . 25 39.9cal/mol/
 $S(T) = 67.2\text{cal/mol/K}$

, Temperature dependence of vapor pressure(mmHg)

t ()	24.9	35.9	44.9	54.9	65.2	72.0	75.9
p(mmHg)	123.20	197.64	283.36	410.56	586.08	728.91	822.85

Temperature dependence of HCFC-122a solubility in water

t ()	20.0	32.0	40.0	50.0
S(wt, %)	0.178	0.111	0.095	0.084

, Temperature dependence of water solubility in HCFC-122a

t ()	20	25	30	35	40	45	50
S(wt, %)	0.046	0.058	0.062	0.069	0.078	0.081	0.085

, HCFC-122a 90 , 91 , 92 3
 1 40 3000mg/m3(400ppm)
 가 가 CFC-113
 1,1,1-TCE 가 가

가 CFC-113 1,1,1-TCE 가 가
 HCFC 2030 가 가
 가 HCFC

【 2】

	HCFC-122a	CFC-113	HCFC-225 ³	HCFC-141b	1,1,1-TCE
	CHClF-CCl ₂ F	CCl ₂ F-CClF ₂	C ₃ HCl ₂ F ₅	CH ₃ -CCl ₂ F	CH ₃ -CCl ₃
	169.4	187.4	202.9	116.9	133.4
()	72	47.6	54	32	74.1
()	-174	-35	-131	-103	-32.6
(25) (g/cm ³)	1.55	1.56	1.55	1.23	1.34
() (cal/g)	43.3	34.4	34.6	52.8	56.7
(25) (C.P)	0.78	0.68	0.59	0.43	0.75
(25) (dyne/cm)	22.8	17.3	16.2	18.4	25.1
(25) (wt, %)	0.145	0.017	0.033	0.066	0.07
(25) (wt, %)	0.058	0.011	0.031	0.042	0.05
K B	48	31	31	58	120
(ODP)	0.04	0.8	0.04	0.15	0.1
(GWP)	0.042	1.4	-	0.09	0.024
()	3.1	90	10	8	7
(vol %)				11~14.8	
	2030 가	96 1 1			96 1 1

HCFC-122a CFC-113 가 1,1,1-TCE
1,1,1-TCE 가
1,1,1-TCE
HCFC-141b 가
32
가
가
HCFC-225

1,1,1-TCE

5000 6 TCE 92 1
, 94 5 96 TCE 가
2 1 TCE , 94 3 , 95
5600
TCE

가
HCFC-122a 12 가
() 3000 HCFC-122a 93 9
가 , 94 2 300 HCFC-122a
1 6 가 HCFC 가 가

가
91 " " ,
92 CFC CFC CFC
, 가 CFC가 CFC
CFC
HF UF6 HCFC-122a
Dupont, Allied Signal, Atochem, ICI HFC, HCFC
가