

<Chemicals & Inorganic Chemicals>

94

가

가

가

WTO

ISO 9000

R&D

가

가

가

가

가가

가

94

(: 100 , %)

1992	1993		1992	1993	가가				
53,627	64,909	21.0	2,083	2,908	39.6	21,222	7,068	4.5	40.0
43,382	45,517	4.9	-2,372	21		16,502	3,000	0.1	36.5
21,807	23,530	7.9	2,265	1,619	28.5	7,998	2,250	6.9	52.6
17,713	20,963	18.4	551	2,048	271.7	5,206	3,000	9.8	48.4
17,001	20,576	21.0	1,997	3,790	89.8	8,531	500	18.4	52.1
14,554	17,009	16.9	599	1,137	89.8	5,022	300	6.7	46.7

(: M/T, %)

1990	1991		1992		1993		1994	
3,376	4,011	7.4	3,579	6.3	3,577	4.8	3,270	8.6
4,751	5,413	13.9	6,712	24.0	6,231	7.2	6,344	1.8
8,949	10,162	13.6	11,174	10.0	13,269	18.7	13,201	0.5
6,403	7,354	14.9	7,605	3.4	8,851	16.4	12,381	39.9
2,858	2,871	0.5	2,849	0.8	2,713	4.8	2,647	2.4
4,255	4,079	4.1	3,844	5.8	4,695	22.1	3,529	24.8
74	90	21.6	202	124.4	224	10.9	215	4.0
73	77	5.5	43	44.2	24	44.2	16	33.4
293	379	29.4	1,203	217.4	414	65.6	356	14.0
2,062	2,891	40.2	2,518	12.9	2,888	14.7	1,580	45.3
68	162	138.2	165	1.9	113	31.5	198	75.2
33,537	37,489	11.8	40,074	6.9	42,999	7.3	43,737	1.7

3
 92 21.0% 가 649 900 93
 4.9% 가 455 1700 , 7.9% 가 235 3000
 29 800 39.6% 가, 92
 93 2100 , 16 1900 28.5%

3
 48.4%, 46.7%, 52.6% 가 , 52.1%,
 가가 가 1000 , 92 ~ 93
 가
 94 가 ,
 가 가
 ICI · BASF
 40%

가 가가 , 가
 가 가

H-Acid 가?
 가 가 가

H-Acid , , ,
 , H-Acid 가 H-Acid 가
 H-Acid 가 가 가 ,
 가 , 가 8% 가 가 ,

H-Acid . 91 ~ 92
 () , ,
 70 H-Acid , 89 ,

90 1 H-Acid , 1 , 91 11
 150 3 2
 2000 ,

H-Acid 가

92 6 29 3 H-Acid Sanhwa, Zenith, Gilin H-Acid

가 6 30 9.5% 6 92 1/4 6

6 50 가 H-Acid 가 가 가 가 가 가

(1994)

(: M/T, %)

1,031	1,006	939	677	496	181	136	131	45	40	23	4,705
21.9	21.4	19.9	14.4	10.5	3.8	2.9	2.7	1.0	0.9	0.6	100

(: 100, %)

1990			1991			1992			1993			1994						
633	299	932	863	451	1,314	41.0	977	472	1,449	10.3	953	508	1,461	0.8	901	539	1,440	1.4
241	120	361	354	152	506	40.2	393	149	542	7.1	402	147	549	1.3	423	158	581	5.8

) 1994

H-Acid 가

(: /Kg)

	()			Sanhwa()			Zenith()			Gilin()		
91 1/4	-	-	-	5.80	6.20	6.10	4.59	-	5.20	4.71	4.85	5.0
2/4	-	-	-	6.20	6.30	6.50	4.63	-	-	4.88	4.85	5.0
3/4	-	-	-	6.00	6.50	6.50	4.63	-	5.25	4.824	5.15	5.0
4/4	6.25	6.30	6.30	6.00	6.50	6.50	4.77	5.23	5.60	4.824	5.15	-
92 1/4	6.25	6.30	6.30	6.00	7.00	6.70	5.05	-	5.60	4.825	5.50	-
2/4	6.00	6.00	6.00	6.50	7.00	6.70	4.98	-	5.60	5.119	5.50	-
3/4	6.00	6.00	6.00	6.50	-	6.70	4.98	-	5.70	5.180	-	-

Sanhwa가 가 6~27% 가

91 9200

Sanhwa H-Acid Kg 11~13 가

91 1 6 15 가 , 가

10 가 7 44 가 가
 가 6 가
 H-Acid 3000 100% 가
 1000 3 H-Acid 2400 80%
 Sanhwa 가
 WTO 가
 가 가
 H-Acid
 H-Acid

(: M/T, 1000 , %)

	1990		1991		1992		1993		1994					
Acid	1,803	34,889	1,827	33,711	3.4	1,324	25,025	25.8	770	14,179	43.3	368	4,975	64.1
Disperse	4,918	92,333	4,335	60,580	34.4	2,849	41,706	31.2	1,905	23,496	43.7	764	8,121	65.4
Reactive	4,113	60,377	3,650	54,917	9.1	2,313	32,763	30.3	1,264	16,794	48.7	359	4,764	71.6
Mordant	439	6,429	402	7,018	9.2	225	3,633	48.2	255	3,597	1.0	52	816	77.3
Solvent	631	10,900	306	8,504	22.0	214	4,901	42.6	115	2,325	52.6	44	1,028	55.8
Sulphur	664	2,154	509	2,221	3.1	495	1,094	50.7	364	744	32.0	40	50	93.3
Basic	236	3,744	258	3,734	0.3	79	1,317	64.7	34	722	45.2	20	83	88.5
Direct	379	6,347	218	4,090	35.6	130	2,037	50.2	79	1,229	39.7	96	959	22.0
Fluorescent	652	13,979	564	19,970	42.9	372	7,951	60.2	147	3,572	55.1	56	2,069	42.1
Vat	419	12,589	469	15,180	20.6	301	9,829	35.3	108	3,050	69.0	52	1,522	50.1
Indigo	145	2,752	150	2,833	2.9	54	1,008	64.4	41	729	27.7	35	616	15.5
Pigment	936	20,717	1,331	33,172	60.1	1,157	27,181	18.1	845	21,234	21.9	816	17,870	15.8
Total	15,335	267,210	14,019	245,930	8.0	9,513	158,445	35.6	5,298	91,671	42.1	2,702	42,873	53.2

)

4 2999 92~93 90 3 3537 , 91 90 11.8% 가 3 7489 , 92 4 74 , 93
 , 94 4 3737 1.7% 가
 가 7% , 94
 , 가가

94

92 3.4% 가 7605 , 93 92 16.4% 가 8851
 , 94 93 39.9% 가 1 2381
 90 8949 94 1 3201 47.5% 가
 , EU

8.6% 91 90 7.4% 가 4011 , 92 5~9% 94
 3270 , 95
 93 92 7.2% 6231 , 94 6344 1.8% 가

가
 94 93 45.3% 1580

93

가 가

93

94

가 (: /Kg)

가가

	1990	1991	1992	1993	1994
Vat	30.35	32.37	32.65	28.24	29.27
Pigment	22.13	24.92	23.49	25.13	21.90
Fluorescent	21.44	35.41	21.37	24.30	36.95
Acid	19.35	18.45	18.90	18.41	13.52
Indigo	18.98	18.89	18.67	17.78	17.60
Disperse	18.77	13.97	14.64	12.33	10.63
Solvent	17.27	27.79	22.90	20.22	23.36
Direct	16.75	18.76	15.67	15.56	9.99
Basic	15.86	14.47	16.67	21.24	4.15
Reactive	14.68	15.05	14.16	13.29	13.27
Mordant	14.64	17.46	16.15	14.11	15.69
Sulphur	3.24	4.36	2.21	2.04	1.25

90 138.2% 가 162 , 91
 94 93
 75.2% 가 198 , 가가
 90 932 91
 90 41.0% 가 1314
 3.5%
 , 92 10.3% 가 , 93
 1461 0.8% 가

94 가 , 1440 1.4%

가

ICI

가

90 361 91 90 40.2% 가 506 , 92 7.1%, 93

1.3%, 94 5.8% 가

17.9% 12.3% LG 39.6% LG

3

60%

3 가 75.1%, 46.5%, 67.45, 42.9%

95.9% 100%

33.8% 26.9%,

20.4% 47.3%

97.5%, 97.3%

가

75.3%

가 , LG

70%

10%

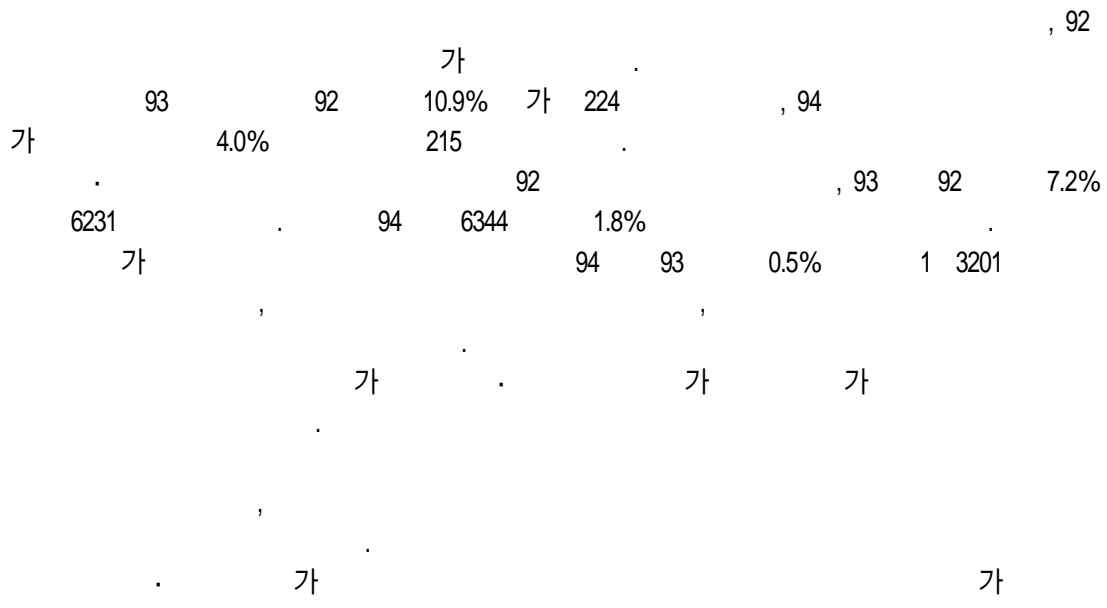
94 95

가

(1994)

(: %)

47.4	24.0	23.9	LG	39.6	33.8	26.1
24.1	12.1	22.5		17.6	27.0	20.4
9.0	11.3	21.0		12.3	15.9	19.5
5.3	10.4	16.2		11.5	9.2	11.6
4.4	10.2	5.1		6.4	7.6	11.0
3.6	9.4	5.0		5.9	5.2	6.9
3.4	7.4	2.7		2.7	1.1	1.9
1.8	4.8	2.4		2.4	0.2	1.8
0.7	4.3	1.0		1.3		
0.3	2.5	0.2				
	2.5					
	0.6					
100	100	100		100	100	100
95.9	100	97.5		97.3		75.3
4.1		2.5		2.7		24.7
100	100	100		100	0	100

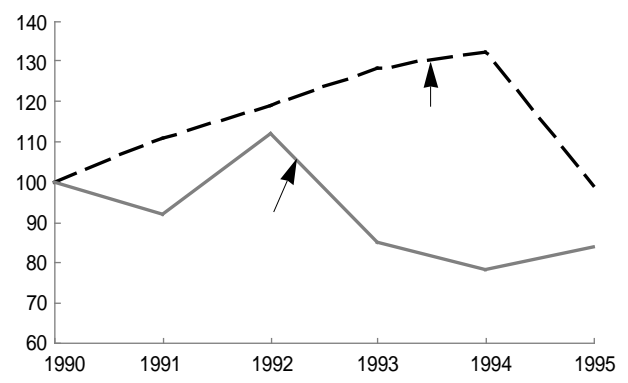
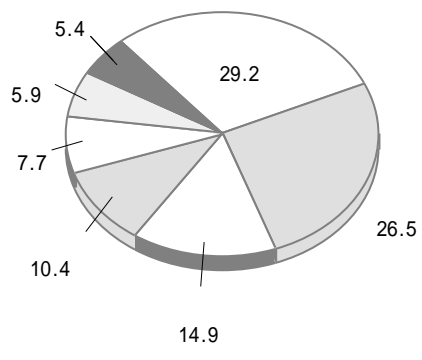


BTX

(1994)

(: %)

(1990=100)



Sodium naphthionate	-	(Red2, Red28, Brown 44) (Red13, 14, 18, 27, 88, Green 35, ©Brown 14) (2)
6-Nitro-1-diazo-2-naphthol-4-Sulfonic acid.	-	()
O-Nitro chlorobenzene	,	,
3-Nitrotoluene	NaNO ₂ 3-Nitro-4-amino-toluene	
O-Nitrotoluene	,	() 7
Sulfanilic Acid	,	(CI yellow24, Red 84, Violet 9, Brown 1A) (CI yellow 17, yellow23, Orange1, Orange 20, Violet 63, Black 94) (CI Orange 6)
C-Acid	,	Azo
P-Anisidine	P-	,
P-Aminophenol	P-Nitro chlorobenzene Aniline,	,
H-Acid	,	(CI Red2, Red3, Red4, Red17, ©Red21, Violet2, Violet5, Black5) (가) (CI Blue15, Green 5P, Black 19) (CI Green19, Black1)
N-Acetylsulfanyl chloride	O- , Na ₂ S ₂ , ,	P-Base
P-Cresamine	P-	,
1-Chloro-2-nitrodoenzene	,	
1-Chloro-2,4-dinitrobenzene		(Sulfur black)
1-Chloro-4-nitrobenzene	,	,
O-Tolidine	ONT (O-Nitrotoluene)	(-BX, 3B)
2,4,5-Trichloroaniline	2,4,5-	
P-Base	Aromatic	,
Fischer's Base	,	,

36 , 11
7.5%

BTX(Benzene, Toluene, Xylene) 가 153 ,

15

200

가

R&D 가

가

< 1995/2/15 >