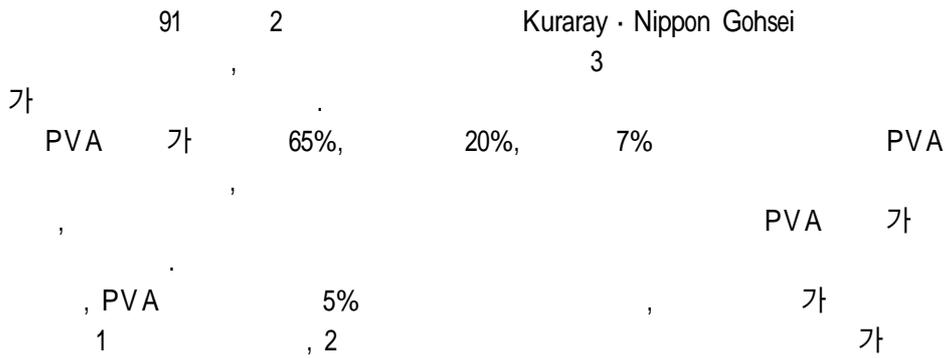


<PVA>

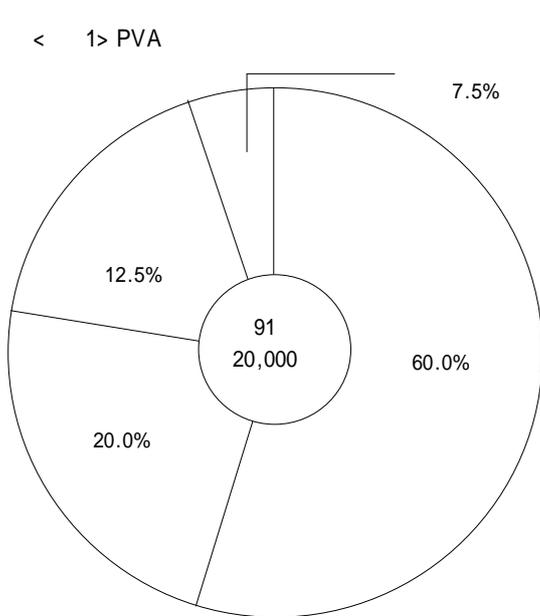
TDI 가

“ ”

PVA(Poly Vinyl Alcohol)



VAM(Vinyl Acetate Monomer) PVA (CH₃CO₂H) 1:1.3 PVAc PVA 1
 PVAc Alcoholysis PVA Kuraray
 5000 1 7000 PVA



가 3
 PVA 91 2
 5.3% 가
 91 가 90 1 9000
 6.7% 가 88 2 400 10.9% 가
 89 PVA 1 7800
 12.7% 가
 88 가
 가
 92 PVA 91
 5.0% 가 92 2 1000
 , 93 2 2050

1 5000 2~3 가 , 80% 가 1 2000
 58% 가 가 가

80% 가 1 2000 , 25.0%
 , 1 5000 2 7000 2 1000
 , 1 5000 (300)
 가 , 3

< 1> PVA

(: , %)

	1986		1987		1988		1989		1990		1991		1992		1993	
	-	-	-	-	-	-	-	-	-	-	-	-	15,000	-	30,000	100.0
	15,200	18,400	21.1	20,400	10.9	17,800	12.7	19,000	6.7	20,000	5.3	15,000	25.0	10,000	33.3	
	15,200	18,400	21.1	20,400	10.9	17,800	12.7	19,000	6.7	20,000	5.3	30,000	50.0	40,000	33.3	
	-	-	-	-	-	-	-	-	-	-	-	-	4,500	-	5,000	11.1
	15,200	18,400	21.1	20,400	10.9	17,800	12.7	19,000	6.7	20,000	5.3	10,500	-	15,000	42.9	
	15,200	18,400	21.1	20,400	10.9	17,800	12.7	19,000	6.7	20,000	5.3	21,000	5.0	22,050	5.0	

() 100% 가 , 1992 1993

< 2> PVA

(: , %)

	1989		1990		1991		1992	
	6,500	36.5	6,700	35.3	3.1	7,000	35.0	4.5
	5,300	29.8	5,200	27.4	1.9	5,000	25.0	3.8
	11,800	66.3	11,900	62.7	0.8	12,000	60.0	0.8
	3,000	16.9	3,500	18.4	16.7	4,000	20.0	14.3
	1,000	5.6	1,300	6.8	30.0	1,500	7.5	15.4
	2,000	11.2	2,300	12.1	15.0	2,500	12.5	8.7
	17,800	100.0	19,000	100.0	6.7	20,000	100.0	5.3

PVA 2 , 3
 , PVA 91 7000 (35.0%) , 5000 (25.0%)
 1 2000 60.0% , PVA
 , PVA 가
 91 4.5% 가 , 3.8%
 PVA 가 90 0.8% 가
 7500 7.1% 가
 , 4700 6.0% , PVA 가 1 2200
 1.7% 가
 PVA 가 89 66.3%
 90 62.7%, 91 60.0%, 92 58.1%
 PVA 91 4000 20.0% , 1500 7.5% ,
 2500 12.5%
 , 가
 10%

PVA 89 3000 16.9% 90 3500 18.4%, 91
 4000 20.0%, 92 4400 20.9% , 90 89
 16.7%, 91 14.3%

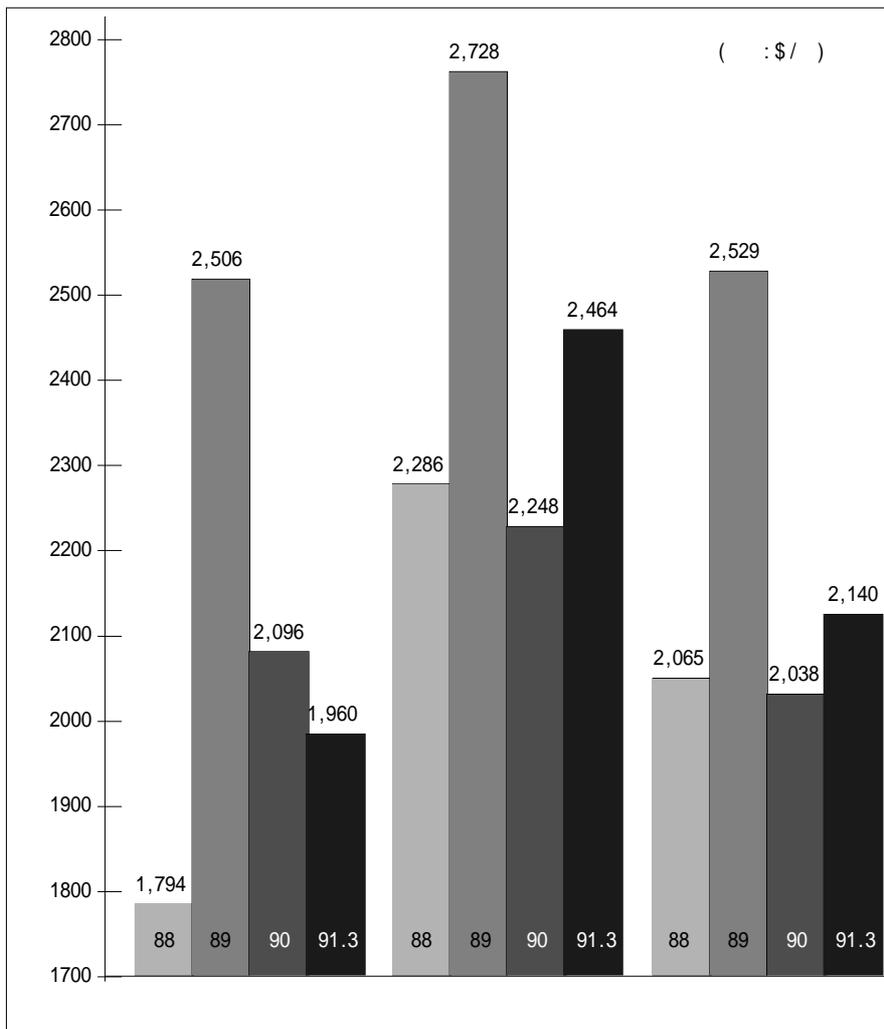
< 3>

(: , %)

		1989		1990	
Kuraray Nippon Gohsei Denkikagaku Unitika		12,969	79.8	14,986	85.2
Dupont		1,292	7.9	1,028	5.8
Changchun		905	5.6	1,114	6.3
		1,094	6.7	484	2.7
		16,260	100.0	17,612	100.0

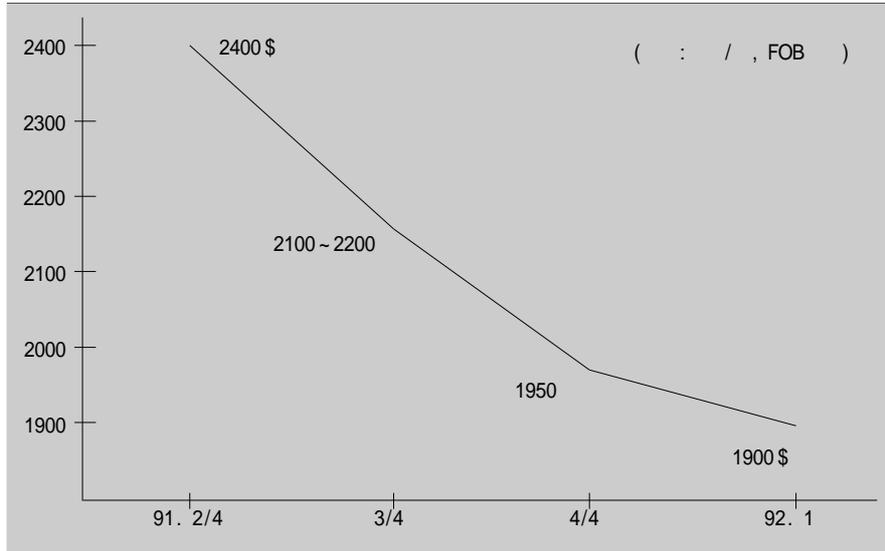
()

< 2> PVA 가



60% 가 , 89 1000 5.6% 90 1300 6.8%, 91 1500 7.5% 가 90 30.0%, 91 15.4% 가 4400 (20.9%), 1700 (8.1%)

< 3> PVA 가



PVA (12.5%) 92 8.0% 가 2700 (12.9%) PVA 91 2500

< 4> Poly Vinyl Alcohol

		Completely Hydrolyzed		Partially Hydrolyzed grade		Special grade	
		PVA-117	PVA-124	PVA-205	PVA-217	PVA-420	PVA-224C
	Vinyl Acetate Emulsion						
	Vinyl Chloride Suspension						
	Paper Adhesion						
	Remoistenable Adhesives						
	Plywood						
	Surface Sizing						
	Pigment Coating						
	Finishing						
	Cotton Yarn/Rayon Spun Yarn						
	Synthetic Spun Yarn						
	Synthetic Filament Yarn						
	Rayon Filament Yarn						
	Building Industry						
	Cosmetic						
	Ceramic/Ferrite Binder						
	T.V. Colour Tubing						

PVA 가 6 50 , 92 1 FOB
 1900~1950
 PVA 가 Kuraray가 91 2/4 2400 3/4 1950 , 1
 1900
 205MB, 205 217 217, 205 900 , 420 1950
 가 , 가 kg
 1850~1900
 가 VAM 가

< 5> PVA

(:)

가					
		E.I Dupont	61,000	Elvanol	
		Air products	52,000	Vinol	
			(32,000)		91.
			113,000		
		Revertex	3,000		
		Rhône-Poulenc	8,000	Rhodoviol	
		Hoechst	24,000	Mowiol	
		Wocker Chemie	5,000	Polyviol	
		U.E.R.T	7,000		
			47,000		
		Nippon Gohsei	65,000	Gohsenol	
		Denki Kagaku	29,000	Denka Poval	
		Kuraray	124,000	Kuraray Poval	Vynylon Textile 54 Vynylon Film 10
		Unitika	29,000	Unitik Poval	
		Chang Chun	40,000		
			(20,000)		90.
			153,000		
			440,000		
			600,000		

, 3 PVA 가 80%
 Kuraray · NipponGohsei · Denki-kagaku 가 가
 , , Chang Chun
 , 60%, 80% Kuraray 가 가 가
 PVA가
 BP 20~30% 가 , 1 670~680 VAM가
 700 PVA가
 , Kuraray · Gohsei VAM 가
 , VAM 가가 PVA가 , PVA

, VAM
 , PVA 35 , 가 가
 , 60 24 7000 41.2% ,
 , Kuraray 12 4000
 , Nippon Gohsei가 6 5000
 Chang Chun 90 2 6 ,

PVA

< 1992/2/1 >