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가

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가

8

25 7400

77.8%

25 5500

16.4% 가

,

가

,

80

31%

91 (1~9) 56

, 5

가

17%

90

, 91 9 73.7% 가

가

가 147

2

11

가

< 1>

(:1000 , %)

		1990	1992	1995	2000		
						'88 ~ '95	'88 ~ 2000
		1,109	1,244	1,384	2,804	5.8	7.8
		831	964	1,228	1,875	12.0	10.7
		831	964	1,228	1,875	12.0	10.7
		0	0	0	0	—	—
P P		488	588	628	978	10.7	10.1
		439	471	565	880	15.0	12.5
		672	787	999	1,485	5.6	6.7
		-233	-316	-434	-605	—	—
A N		153	203	223	323	5.5	6.4
		138	183	201	291	12.2	10.3
		138	183	201	291	12.2	10.3
		0	0	0	0	—	—

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「8.5」

92

6~7%

가 가

< 2>

(:1000 , %)

		1990	1992	1995	2000		
						'88 ~ '95	'88 ~ 2000
		2,095	2,485	2,735	3,985	6.5	7.0
		1,640	2,050	2,462	3,587	12.9	10.8
		1,640	2,050	2,462	3,587	12.9	10.8
		0	0	0	0	—	—
L D P E LLDPE		514	924	1,044	1,524	12.6	10.6
		463	710	940	1,372	16.6	12.9
		1,131	1,326	1,681	2,490	6.7	7.3
		-668	-616	-741	-1,127	—	—
H D P E		465	465	515	765	1.5	4.2
		419	410	464	689	8.4	8.2
		490	574	728	1,083	8.4	8.3
		-71	-155	-264	-394	—	—
P S		145	145	245	395	18.4	14.8
		113	156	201	356	22.0	17.8
		298	349	442	658	8.8	8.6
		-185	-193	-241	-302	—	—
S M		240	240	265	385	14.9	11.9
		189	196	229	347	18.4	14.3
		189	245	314	524	15.4	24.2
		0	-49	-85	-177	—	—
P V C		989	1,189	1,189	1,689	8.3	7.9
		769	905	1,070	1,520	8.5	8.0
		789	925	1,173	1,743	8.3	8.3
		-20	-20	-103	-223	—	—
V C M		989	1,189	1,189	1,589	8.3	7.6
		769	905	1,070	1,520	8.5	8.0
		769	905	1,070	1,520	8.5	8.0
		0	0	0	0	—	—
E D C		531	861	1,521	2,791	33.5	24.5
		478	775	1,171	2,068	32.8	23.7
		478	775	1,369	2,512	35.8	25.7
		0	0	-198	-444	—	—
E G		425	455	505	755	7.5	7.8
		383	410	455	680	12.5	10.7
		383	456	594	925	9.2	9.2
		0	-46	-139	-245	—	—

East-West Center , 91 220
246 , () 34 , 20 , 15 , 144

< 3>

(:1000)

	1990	1991	1992	1993	1994	1995
	1,399	1,655	1,801	2,143	2,326	2,517
L D P E	400	500	550	800	850	900
E O	225	285	315	345	375	420
E G	300	380	420	460	500	560
V C M	719	816	898	979	1,081	1,173
P V C	705	800	880	960	1,060	1,150
H D P E	400	450	475	500	550	600
S M	153	186	206	210	278	310
P S	120	140	140	140	200	225
	810	956	1,106	1,208	1,329	1,434
P P	330	420	500	525	580	600
A N	100	130	160	200	240	300
P O	5	8	10	20	25	25
	291	332	380	429	494	559
S B R	200	230	265	300	350	400
	121	121	162	182	182	189
	90	90	120	135	135	140
	601	653	721	765	846	908
	134	140	145	151	156	161
P - X	488	585	650	715	793	910
O - X	110	120	140	160	180	200
T P A D M T	750	900	1,000	1,100	1,220	1,400

:The Pace Consultants Inc., Petrochemicals in China

, 92 248 5000 ,
205 124 4000 , 96 4000
The Pace Consultants Inc Petrochemicals in China , 180
1000 , 110 6000 , 72 1000 , 38 ,

2000
LDPE 55 , 115 60 , HDPE 47
5000 70 , PP 50 82 , PVC 88 92
HDPE 22 5000 , PP 32 , PVC 4
PS 14 , 33 19 , SM 20 6000 , 25 6000
5
EG 42 , 53 11 , TPA/DMT
100 , 120 20

< 4>

(:1000)

	1990	1991	1992	1993	1994	1995
	1,399	1,655	1,801	2,143	2,326	2,517
L D P E	900	1,050	1,150	1,300	1,400	1,500
E O	225	285	315	345	375	420
E G	430	485	530	575	630	710
V C M	719	816	898	979	1,081	1,173
P V C	765	840	920	1,000	1,100	1,200
H D P E	600	650	700	750	800	850
S M	203	236	256	270	348	390
P S	270	300	330	340	380	425
	810	956	1,106	1,208	1,329	1,434
P P	730	770	820	875	950	1,000
A N	100	130	160	200	240	300
P O	5	8	10	20	25	25
	291	332	380	429	494	559
S B R	200	230	265	300	350	400
	121	121	162	182	182	189
	100	110	120	135	145	160
	601	653	721	765	846	908
	134	140	145	151	156	161
P - X	488	585	650	715	793	910
O - X	110	120	140	160	180	200
T P A D M T	1,000	1,100	1,200	1,300	1,420	1,600

:The Pace Consultants Inc., Petrochemicals in China

Beijing China National Technical Import Corp.
 , (115) 5 7000 , 94 , Yanshan Petrochemical
 30 ~45
 Dushanzi ABB Lummus Crest Snamprogetti가 , 14
 LDPE(12), PP(7), MEG(4) Urumgi
 General Petrochemical
 Guangdong Technimont, Stone & Webster 13
 , Dongying 14 , 10 LDPE, 4 MEG,
 5 AN, 3
 Henan (14), LDPE(14), PP(4), PX(16), TPA(22 5000),
 (6), (2) , Hebei 11 5000 ,
 LDPE(12), AN(5), (3) 93
 95 가 ,

92 7 14 3500 , 2 2000
 15.4% , 15 3017 ,
 1695 2000 1.1% , 가 가
 , 가
 . , 2 2200
 , , , PX, SM,
 EDC EG · DMT ,
 7 224 2000 , 1613
 7.5% , 58 3.7% , 1241
 9000 15.5%, 875 9000 27.8%
 2347 1 7139 6000 13.7% ,
 3 .

< 5>

(:1000)

	1990	1991	1992	1993	1994	1995
	0	0	0	0	0	0
L D P E	500	550	600	500	550	600
E O	0	0	0	0	0	0
E G	130	105	110	115	130	150
V C M	0	0	0	0	0	0
P V C	60	40	40	40	40	50
H D P E	200	200	225	250	250	250
S M	50	50	50	60	70	80
P S	150	160	190	200	180	200
	0	0	0	0	0	0
P P	400	350	320	350	370	400
A N	0	0	0	0	0	0
P O	0	0	0	0	0	0
	0	0	0	0	0	0
S B R	0	0	0	0	0	0
	0	0	0	0	0	0
	10	20	0	0	10	20
	0	0	0	0	0	0
	0	0	0	0	0	0
P - X	0	0	0	0	0	0
O - X	0	0	0	0	0	0
TPA DMT	250	200	200	200	200	200

:The Pace Consultants Inc., Petrochemicals in China

1173 9000 1 5404 6000
 7.6% .
 SM 1001 3000 SM 1 895 7000 9.2%
 . PX 81 6000 .
 4992 8000 243 4000 4.9%

EG 137 6000 , DMT 101 4000 , 4 4000

가
7 9 1757 9000 , 1 5901

17.3%
LDPE 1 829 7000 3982 5000 36.8%
, HDPE 1 9071 5000 5643 1000 29.6%, PP 2 634 1000
3670 5000 17.8% , PE PP

< 6> () (:1000 ,)

	1991()		1991()		1991.6()		1992.6()		
O - X P - X M - X E G S M C H	11,974	7,328,296	1,286	517,596	—	—	—	—	—
	24,360	11,489,063	9,013	3,459,937	799	510,204	1,867	722,461	133.7
	45,345	13,503,250	—	—	—	—	—	—	—
	313,267	96,537,725	73,795	22,789,998	18,817	5,800,855	34,994	10,035,049	86.0
	27,020	11,215,488	71,330	3,099,316	7,134	3,099,316	—	—	—
	24,625	9,591	1,433	5,276,244	—	—	—	—	—
	85,951	27,091	19,238	7,003,329	9,980	4,310,557	18,217	6,026,519	82.5
	8,891	4,435,902	2,000	1,164,000	2,000	1,164,000	2,987	1,225,880	49.4
	20,772	5,565,117	20,772	5,565,117	—	—	1,397	344,976	—
	174,800	96,266,174	14,089	7,376,827	4,305	2,392,207	20,461	8,997,301	375.3
	604	496,618	—	—	—	—	13	9,742	—
	13,871	7,685,837	2,160	1,349,970	112	72,528	3,968	2,436	3,442.9
	2,336	1,300,519	1,701	952,317	—	—	826	248	—
	19,415	3,165,913	1,739	2,673	—	—	22,724	3,308,631	—

PVC 4642 2000 104 7000 2.3%, PS
9845 1000 217 6000 2.2%, ABS 8635 6000 246 2000
2.9% PE PP
5106 6000 225
3000 4.4% BR 136 7000
BR 1631 9000 8.4%
가 , 92 2 가 45%
30% ,

PE · PP 120 가

1
40~50%

가

가

90

< 7) SINOPEC

(: , %)

	1987	1988		1989		1990		1991	
	9,000	9,328	10.4	9,622	3.2	9,690	0.7	10,250	5.8
	82	111	35.4	127	14.4	144	13.4	156	8.3
	73	103	41.1	120	16.5	136	13.3	160	17.6
	53	59	11.3	61	3.4	79	29.5	90	13.9
	15	19	26.7	22	15.8	23	4.5	25.5	10.9

) SINOPEC:

< 8> SINOPEC

(:100)

	1991
Gasoline	21.06
Kerosene	3.97
Diesel Fuel	25.01
Lubricating Oil	1.55
Hydrocarbon Solvents	0.37
Fuel Oil	28.59
Petroleum Wax	0.65
Petroleum Coke	1.54
Petroleum Asphalt	2.45
Feedstock of Detergent	0.04
Light Oil for Chemical Industry	7.51
Naphtha	3.54
Ethylene	1.56
Plastics	1.60
Synthetic Rubbers	0.26
Synthetic Fibre Monomers	0.90
Polymers for Synthetic Fibres	0.52
Synthetic Fibres	0.42
Synthetic Ammonia	3.29
Nitrogen Fertilizer(100%N base)	2.41
Urea	5.15

8 24

가

11

78

6

5

90

23% 11.5% 가 63%

85 5 50%

가 가 가 가 가

< 9> () (:1000 , ,)

			1991()		1991()		1991.6()		1992.6()		
O P M E S C	- X	284,891	197,398,186	—	—	—	—	—	—	—	
		301,346	177,402,248	2,907	1,588,702	1,849	1,222,665	1,087	386,895	41.2	
	- X	296,285	128,486,171	31,531	13,301,709	6,280	2,741,114	12,427	4,463,290	97.9	
		—	32,464	—	—	—	—	—	—	—	—
	- X	77,097	38,890,864	—	—	1,787	852,803	—	—	—	
		364,177	156,808,557	18,896	7,697	4,028	2,181,812	7,086	3,004	75.9	
	- X	2,028	793,371	—	—	—	—	—	—	—	
		G	375,657	208,872,272	3,662	2,225,191	3,662	2,225,191	—	—	—
	- X		7,075	4,980,256	—	—	—	—	—	—	—
		M	240,441	160,045,464	2,998	2,722,212	2,998	2,722,212	—	—	—
H	6,889		4,316,406	—	—	—	—	—	—	—	
	4,345	4,024,192	258	181,253	88	74,049	—	—	—		
	5,091	3,734,357	113	111,134	13	14,721	—	—	—		
	368,334	64,225,028	1,879	432,034	1,879	432,034	—	—	—		

SE-GB, 7BF 10 가 ,

가 가

91 8900 , 92 6300

DOP · PVC · ABS · LDPE 12 ,

223

91 800 , 92 320 ,

18 8 18 30 13

가

가 , 가
가 .

, 91 . 92

가

< 10>

(: , %)

	1987	1988	1989	1990	1991
	-37.7	-77.1	-66.5	87.1	81.2
	394.4(27.5)	475.4(20.6)	524.9(10.5)	620.7(18.1)	719.1(15.8)
	432.1(0.7)	552.5(27.9)	591.4(7.0)	533.6(-9.8)	637.9(19.5)
	152	175	170	286	421*

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(:)

	1991		1992(1~3)	
L D P E	—	12,593	45	19,754
H D P E	429	20,521	—	24,451
P P	—	46,706	30	28,946
P S	51	1,051	—	415
E P S	—	815	—	234
S A N	—	2,603	—	45
A B S	83	7,434	—	1,017
P V C	24,451	673	192	147

) PS:GPPS, HIPS

Fine Chemical High Grade

가 가

가

가

가

88 4 4800

0.81%

1.60%

, 7 6200

89 4 6900

0.79%

, 7 9400

1.51%

90 2844 6000 , 91 4323 1000 , 92 (1~7

) 2674 7000

, 90 1746 8000 , 91 2007 3000

, 92 (1~7) 428 7000

가

가

89

90 374

50 8
Tianjin Boh Ait(69 5000), Dalian Chemical(60), Hebe(60),
Qingdao(60), Shan Dong(60) 95 520
가가
가

< 12> 16

가
(:100 , %)

	1990	90/89	90/85
가	12.745	4.50	86.90
	21.551	7.90	209.00
	3.793	25.20	88.70
	3.352	4.50	42.70
	11.969	3.80	78.20
	0.318	-3.10	16.10
	21.29	2.90	24.10
	18.80	4.80	42.20
	0.226	9.60	94.80
	0.656	11.90	51.50
	0.640	8.30	44.40
	0.359	37.50	92.20
	2.281	-7.30	18.00
	0.136	7.10	51.40
	0.846	8.80	10.10
	() 32.095	-0.80	66.70

< 13>

(:100 , %)

	1990(80 가)	
	0.920	1.19
	10.139	13.16
	17.964	23.32
	13.485	17.50
	4.210	5.46
	0.002	—
	0.267	0.35
	3.392	4.40
	17.364	22.54
	6.050	7.85
	4.252	5.52
	2.004	2.60
	0.542	0.70
	2.366	3.07
	0.137	0.18
	0.296	0.38
	1.717	2.23
	2.063	2.68
	0.389	0.50
	18.101	23.49
	1.899	2.46
	4.824	6.26

) benefication

< 14>

(: , %)

	1989	1990	
V a t	54,848	67,719.00	23
	5,379	5,352.43	0.49
	8,177	5,857.43	28.3
	3,344	3,342.40	1.6
	11,130	10,058.81	9.6
	6,970	8,190.03	17.5
	7,799	6,984.77	10.4
	19,526	21,480.94	10
	691	524.00	24.16
	2,173	2,539.06	16.84
	7,324	4,282.20	41.6

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(:1000)

	1990	1991	1992.7
	658,804	710,860	450,172
	28,446	43,231	26,747
	306,721	306,361	196,654
	17,468	20,073	4,287

)

가

가

가

가

< 16>

(: , 1000 , %)

	1992.7						1991					
	4,618	7,663	661	14.3	319	4.1	7,805	14,347	878	11.2	420	2.9
	2,081	3,166	1,794	86.2	2,610	82.4	3,377	5,266	2,720	80.5	4,045	76.8
	5,997	3,904	5,393	89.9	2,414	61.8	11,038	6,599	10,176	92.2	4,668	70.7
	29,867	9,555	5,651	18.9	1,774	18.6	91,956	35,765	16,280	17.7	5,892	16.4
	3,765	711	2,943	78.2	422	59.3	10,970	1,802	9,487	86.5	1,392	77.2
	85,415	10,378	59,912	70.1	7,051	67.9	131,011	17,333	94,293	72.0	12,204	70.4
	186,131	33,923	6,283	3.4	1,948	5.7	236,931	43,532	6,654	2.8	1,240	2.8
	5,060	9,266	2,016	39.8	865	9.3	8,537	15,990	3,399	4.0	1,527	9.5

가

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< 1992/10/15>