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1 http://www.tengzhou.gov.cn/zzq/zfbm/hjbhj/gzdt/202212/t20221202_1574596.html

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[2] https://www.mee.gov.cn/ywdt/zbft/202111/t20211103_959021.shtml

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PO CHPPO

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4 PO 2019

CHPPO PO 30 / PO

2019

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	DMTO OCC	DMTO P1 60m 2.2m	DB37/2376-2019
	EVA VOCs	RTO VOCs P2 30m 2.3m	RTO GB31572-2015 DB37/2376-2019 VOCs GB31572-2015 6 DB37/2801.6-2018
	EVA	P3 30m 0.9m	GB31572-2015 DB37/2376-2019
	EVA	P4 30m 0.3m	
	PO PCC	VOCs P5 50m 2.2m	GB18484-2020 VOCs 6 DB37/2801.6-2018 DB37/2376-2019
		DMTO 4,062.00kg/h P6 100m 2.2m	DB37/664-2019

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		DMTO OCC EVA PO PPC VOCs
		/ VOCs
		DMTO OCC EVA PO PPC
		DMTO PO
		COD

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		Nm^3/h	/
130 /		41,680	10 mg/m^3 50 mg/m^3 10 mg/m^3
		1.6 t/h	H_2O 88%wt N_2 9% O_2 CO_2 0 3% VOCs
		8.8 t/h	
9 /		800/ 13,800	~92% 0.2%~100ppm CO_2(~8%) ~94% 60~100ppm O_2 0~5% CO_2 8~1.2% 79% O_2 21%
20 / EVA		8.08 10.1 t/	0.5% 69.5% VA 30%
		0.5	76mg/Nm^3
		3,070	10mg/Nm^3 NMHC

147,000

		Nm^3/h	/
		202.1 250	80.502% 11.032% 0.211% 0.003% 0.112% 0.011% 0.035% 0.094%.
		22 111	36% 12% 49% 3%
		77 231	27.59% 72.41%
	PO PO	53	PO
		139 278	PO 29.46% 0.02% 3.34% 0.004% 2.25% 0.004% 0.009% N_2 61.11% O_2 3.7%
		185 222	45.0% PO41% 11.4% 1.2% 0.2% 1.0% 2- 0.1%
		40	PO73.15% 1.30% 12.43% 2.35% 2.17% 8.58%
		799 2,397	H_2 98.78% 0.70% 0.11% 0.31% 0.09%
		44 88	H_2 96.56% 3.03% 0.40%
		348 697 12	H_2 93.02% 2.42% 2.23% 1.79% 0.49% 0.05%

			t/h		/ mg/L
					PH 6-8 100 ppm
				13	COD 1,000-3,000 100
			1.92		COD 10,000-35,000 NaOH 1.35 wt% H_2O 88.51 wt% TDS 11.50 wt% PH >10 Na_2CO_3 10.14wt% BOD (mg/l) 6,000 TOC (mg/l) 2,000~6,000 mg/l 25~1,000 mg/l 20~50 mg/l 10~30 mg/l 5 mg/l 5
9 /				2	COD 500 350
20 / EVA			1.5 4		BOD_5 200 200
		10min/ .	40		BOD_5 200
30 /			13.5	33.1	0.06% 0.33% 0.01% 0.13% 0.02% 0.01% 0.04% 0.01% 0.02% COD 12,500
				10	-
5 / PPC			10		COD 6,000ppm PC 0.2% 20ppm PPC
			1		BOD <500 ppm PPC
			1		COD 500 ppm
	2 Nm^3/h PSA			2	COD 200 100
				2	COD

				t/h		/ mg/L
				11	30	COD
					5	COD
				46	66	COD
					154	COD
					1	COD
				2	15	COD
				182	240	COD
				2	4	COD
				5	10	COD
				5	10	COD
				20	50	COD

3

			t	t/a	
130 /				333	Al_2O_3
		5 1	7.5	1.5	$Pd-Al_2O_3$
		3-5 1	84.3	28.1	SiO_2
9 /		3 1	5.2	1.73	$Pd-Al_2O_3$
	OCC	3 1	1.8	0.6	-
		1 1	$9m^3$		

			t	t/a	
	VA	3-8 1	188/	62.67	
		15 1	35m^3	2.33	
		1 1	165	165	TiO_2/SiO_2
		2 1	65	32.5	Pd/ SiO_2
30 / PO		6 1	100m^3	16.67	Al_2O_3 SiO_2

			dBA
5 / PPC			90
			90
			85 90
	2 Nm^3/h PSA		90
		PSA	85
	5 / PPC		90
			90
			85 90
			90
			85 90
			110
			85

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165,505

	32,150	19.43%
	116,490	70.38%
	1,985	1.20%

	7,400	4.47%
	2690	1.63%
	2,560	1.55%
	2,230	1.35%
	165,505	**100%**

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20 / EVA - 30 / PO

5 / PPC 19.50%

6.99 3

117,212.13 EVA PO PPC

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PO

75%

2022 12 19

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75%

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	175.00	0.35%
	140.00	0.28%
	130.00	0.26%
	130.00	0.26%
	80.00	0.16%
	50,000.00	100.00%

2021 12

12,500

2021 9 26 37,500

100%

2021 12 7

647 30%

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EVA PPC PO

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130 / DMTO 20 / - EVA

30 / PO 5 / PPC

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5 / PPC	PPC “ ” “ ” 2021 12 23 PPC “ ” “ ” 2021 12 24 < PPC > “ ”			1 CN201811628350.7 2 50% 3 4 5 PPC 5 / PPC	1% PPC 7	

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20 / - EVA	EVA LUPOTECH T Basell Polyolefine GmbH Tecnimont S.p.A. “ TCM ” 2022 2 200,000 / - LUPOTECH T			1 2 3 TCM	1 2 3	
30 / PO	PO -CHPPO					
130 / DMTO	DMTO 2023 3 MTO PDP			MTO PDP PDP PDP MTO PDP	1 PDP 2	

130 /	2023 3 MTO PDP			MTO PDP PDP PDP		

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EVA PPC PO

1 EVA

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EVA

Lyondell Basell

Exxon Mobil Ente Nazionale Idrocarburi, ENI

Lyondell Basell Exxon Mobil

SABTEC EVA

EVA

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EVA

EVA

2022-2023 EVA 2022 EVA

215 46.1% 167.6 66.3%

276.1 34.5% 60.7%

-

EVA 2022 EVA 49.9%

22.0% 12.8%

80% 90%

2022

392.04GW 2022 87.41GW 59.3%

EVA

EVA

EVA EVA

EVA

EVA

2 PPC

1

PPC PO

PPC PPC

PO

PPC

PPC

PPC

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2

2022

2021 170

60%

70%

2025 250

PPC

PPC

PO “ ”

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3 PO

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PO PO/TBA PO/SM CHPPO

HPPO

“ ” 2019

PO 2019 “ 15 /

” “ 20 / ”

PO

CHPPO “ ”

PO

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PO

PO

PO PPC

2022 PO 2021

PO 407.1 /

30.5%

2021 PO 408.4 / 28.4%

PO 2021 PO PO

77%

PO

PO PPC

PO

PO 40%

“ ”

PO

3

30 / PO

30 / PO

4

EVA

EVA

PO

CHPPO

PO

PPC PPC

PPC

PPC

EVA PO

PPC

2023

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EVA PPC PO

EVA	20.00	329,255.91	36.42%
PPC	5.00	71,015.90	7.86%
PO	30.00	386,312.53	42.73%
	/	117,421.06	12.99%
	/	**904,005.39**	**100.00%**

EVA PPC PO

36.42% 7.86% 42.73%

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2022 EVA

EVA 12.10

/ 15.36 / EVA

PPC PO

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1 EVA

EVA

2022 87.41GW

59.3%

EVA

2022-2023 EVA 2022 EVA

276.1 34.5% 60.7%

2025 EVA 350

EVA 35.36 / 2025 EVA

10.02%

2 PPC

2020

2020 9

2022 2021

106.4 2025 300 29.58%

2021 66 2025 250

39.51% PPC “

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PPC 5 / 2025

PPC 2.00%

3 PO

PO PO

PPC

2022 PO 2021 PO

408.4 28.4% 89.4% 2025

PO 550

PO 30 / 2025 PO

5.45%

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EVA PPC PO

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15.36 / EVA

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EVA 20 / EVA

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EVA DMTO

9 / 2023

EVA PO

DMTO PPC PO

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30 / EVA EVA

EVA

2 PO

PO

40 / HPPO

30 / CHPPO 30

/ PO PO/SM 20

/ PO

PO 40%

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PO PPC

PO

3 PPC

PPC PPC

250 / PPC

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EVA EVA

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	EVA	EVA				
		2022	2022 1-9	2021	2020	2019
	16,462.80	19,939.93	21,806.92	18,870.81	10,510.80	11,053.57
	8,212.14	9,761.22	9,895.64	9,336.67	6,549.92	7,645.04
	50.12%	51.05%	54.62%	50.52%	37.68%	30.84%

EVA EVA

2019 2022

2 PPC

2019 2022 PPC PPC

A PPC PPC

A PPC

600143.SH PPC

PPC

PPC

/	2022	2022 1-9	2021	2020	2019
	/	/	33.90%	39.66%	38.43%
PPC	40.64%				

2019 2020-2021

2022

2022

PPC PPC

PPC

3 PO

2019 2022 PO

601678.SH PO

PO

/	2022	2022 1-9	2021	2020	2019
PO	/	-4.90%	38.62%	26.80%	5.94%
PO	27.95%				

2022

2019 2021 PO 23.79%

PO 1

PO CHPPO

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2 PO

DMTO

PO

2022 1-9 PO -4.90% 1

PO 2

PO

PO

2022

2022 1-9 PO

2023 PO

2023 3 PO 10,806.52 / 2022

12 20% PO

PO PO

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PO

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10%	40.14%	26.75%
5%	37.28%	24.52%
	34.15%	22.07%
5%	30.68%	19.37%
10%	26.83%	16.36%

10% 10%

26.83% 40.14% 16.36% 26.75%

30.03%

2

10%	38.47%	25.27%
5%	36.31%	23.67%
	34.15%	22.07%
5%	31.99%	20.47%
10%	29.83%	18.88%

10% 10%

29.83% 38.47% 18.88% 25.27%

69.10%

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	30 / EVA	22.21%	5.75
	6 PBAT	36.75%	4.29
	7.5	20.71%	6.12
	6 / PBAT	24.60%	5.30
	24/74.2 / / PO/MTBE	18.11%	6.96

19.50% 6.99

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		T+1	**T+2**	**T+3**	**T+4**	**T+5**	
		235,828.00	597,762.00	382,822.00	-	-	1,216,412.00
1		30,828.00	77,070.00	46,242.00	-	-	154,140.00
2		26,136.00	65,340.00	39,204.00	-	-	130,680.00
3		92,120.00	230,300.00	138,180.00	-	-	460,600.00
4		37,060.00	92,650.00	55,590.00	-	-	185,300.00
5		49,684.00	132,402.00	103,606.00	-	-	285,692.00
		-	-	-	27,872.00	5,716.00	33,588.00
		235,828.00	597,762.00	382,822.00	27,872.00	5,716.00	1,250,000.00

T 1-5

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2022 12 31 99,062.42

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	50	0%	2%
	15-20	0%	5%-6.67%
	5-10	0%	10%-20%
	10	0%	

	T+4	**T+5**	**T+6**	**T+7**	**T+8**	**T+9**	**T+10**	**T+11**	**T+12**	**T+13**	**T+14 至 T+18**
	66,738.07	66,738.07	66,738.07	66,738.07	66,738.07	66,738.07	66,738.07	66,738.07	66,738.07	66,738.07	66,738.07
	8,024.00	8,024.00	8,024.00	8,024.00	8,024.00	7,266.00	7,266.00	7,266.00	7,266.00	7,266.00	-
	74,762.07	**74,762.07**	**74,762.07**	**74,762.07**	**74,762.07**	**74,004.07**	**74,004.07**	**74,004.07**	**74,004.07**	**74,004.07**	**66,738.07**

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	T+4	**T+5**	**T+6**	**T+7**	**T+8**	**T+9**	**T+10**	**T+11**	**T+12**	**T+13**	**T+14 T+16**	**T+17 T+18**
1												
a	74,762.07	74,762.07	74,762.07	74,762.07	74,762.07	74,004.07	74,004.07	74,004.07	74,004.07	74,004.07	66,738.07	66,738.07
b	19,362.73	19,362.73	19,362.73	18,536.90	18,536.90	18,536.90	18,536.90	16,473.00	15,355.00	15,355.00	15,355.00	264.00
c	62,920.85	62,920.85	62,920.85	62,920.85	62,920.85	62,920.85	62,920.85	62,920.85	62,920.85	62,920.85	62,920.85	62,920.85
d=a+b+c	157,045.65	157,045.65	157,045.65	156,219.82	156,219.82	155,461.82	155,461.82	153,397.92	152,279.92	152,279.92	145,013.92	129,922.92
2												

	T+4	**T+5**	**T+6**	**T+7**	**T+8**	**T+9**	**T+10**	**T+11**	**T+12**	**T+13**	**T+14 T+16**	**T+17 T+18**
- e	815,699.07	815,699.07	815,699.07	815,699.07	815,699.07	815,699.07	815,699.07	815,699.07	815,699.07	815,699.07	815,699.07	815,699.07
f	723,204.31	904,005.39	904,005.39	904,005.39	904,005.39	904,005.39	904,005.39	904,005.39	904,005.39	904,005.39	904,005.39	904,005.39
- g=e+f	1,538,903.38	1,719,704.46	1,719,704.46	1,719,704.46	1,719,704.46	1,719,704.46	1,719,704.46	1,719,704.46	1,719,704.46	1,719,704.46	1,719,704.46	1,719,704.46
h=a/g	4.86%	4.35%	4.35%	4.35%	4.35%	4.30%	4.30%	4.30%	4.30%	4.30%	3.88%	3.88%
i= a+b /g	6.12%	5.47%	5.47%	5.43%	5.43%	5.38%	5.38%	5.26%	5.20%	5.20%	4.77%	3.90%
j=d/g	10.21%	9.13%	9.13%	9.08%	9.08%	9.04%	9.04%	8.92%	8.86%	8.86%	8.43%	7.55%
3												
- k	87,389.53	87,389.53	87,389.53	87,389.53	87,389.53	87,389.53	87,389.53	87,389.53	87,389.53	87,389.53	87,389.53	87,389.53

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	T+4	**T+5**	**T+6**	**T+7**	**T+8**	**T+9**	**T+10**	**T+11**	**T+12**	**T+13**	**T+14 T+16**	**T+17 T+18**
n=a/m	35.73%	27.34%	27.28%	27.05%	26.77%	26.19%	25.93%	25.68%	25.43%	25.19%	22.09%	22.09%
o= a+b /m	44.98%	34.42%	34.35%	33.75%	33.41%	32.75%	32.42%	31.39%	30.70%	30.41%	27.18%	22.18%
p=d/m	75.05%	57.43%	57.31%	56.52%	55.95%	55.01%	54.47%	53.22%	52.33%	51.83%	48.00%	43.01%

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2022		/	132.55	132.02
		93.32	31.78	122.18
		/	4.16	4.16
2022 1-9		/	102.28	101.37
		71.65	22.88	92.77
		/	3.00	2.96
2021		57.00	68.42	126.00
		/	78.49	79.27
		/	3.86	3.84
2020		/	131.82	133.75
		/	3.94	3.88
2019		/	134.24	135.04
		/	3.70	3.71

1 2021 5
2

2019 2022

2019 2022

				2022	**2022 1-9**	**2021**	**2020**	**2019**
				21.15	16.09	22.40	22.98	22.57

DMTO /

				2022	2022 1-9		2021	2020	2019
				14.23	10.17		13.04	13.13	12.58

EVA EVA

	1.00~1.03	EO	0.78~0.79

2019 2020 2021 2022 1-9 2022 95.67% 97.67% 89.61% 92.25% 92.31%

2020 2019 67,187.63 137.41% 2019

2021 2020 1,409.25 1.21%

2022 2021 30,951.46 26.34% 2022

2

1

2019 2022

2019 2022

	2022		**2022 1-9**		**2021**		**2020**		**2019**	
	72,690.64	53.04%	49,748.54	45.66%	47,879.22	45.48%	75,724.63	66.79%	44,269.16	94.64%
	44,883.19	32.75%	44,883.19	41.19%	52,391.50	49.76%	19,500.84	17.20%	-	-
	13,387.54	9.77%	13,387.54	12.29%	1,864.01	1.77%	10,631.22	9.38%	1,002.39	2.14%
	6,075.84	4.43%	933.74	0.86%	3,147.06	2.99%	7,524.92	6.64%	1,506.34	3.22%
	137,037.20	**100.00%**	**108,953.01**	**100.00%**	**105,281.79**	**100.00%**	**113,381.60**	**100.00%**	**46,777.89**	**100.00%**

2

2019 2020 2021 2022 1-9

2022 1,309.82 2,249.84 1,790.14

2,154.48 2,489.78 1.41%

0.92% 0.81% 0.85% 1.03%

1-2

3

1

2

2023 10 / -

1

2022 9 30 12,940.09

	2022/7/19		1.8% 3.2% 3.3%		3,000.00	10.80	2022/7/20	2022/10/18	
	2022/8/1		1.8% 3.2% 3.3%		9,900.00	29.29	2022/8/2	2022/10/31	

2022 9 30

1.8%-3.3%

2022 12 31 0

2

3

2022 9 30 0 2022 12 31 0

2022 9 30 2022 12 31

	2022 9 30		2022 12 31	
	12,940.09	-	-	-
	1,954.67	-	1,944.27	-
	2,128.18	-	21,918.91	-

12 31 1,944.27

3

2022 9 30 2,128.18 2022 12 31 21,918.91

4

2022 9 30 3,060.47 2022 12 31 3,063.76

5

2022 9 30 5,059.89 2022 12 31 14,973.39

2022 9 30 2022 12 31

1 2019 2022

2019 2022

2 2019 2022

3 2022 9 2

2023 3 2

1	2023/3/3		A	
2	2023/3/3		A	
3	2023/3/5			“ ”
4	2023/3/5			
[redacted]	/10			“ [redacted]

CITE2023

6 2023/3/13 CITE2023

[redacted]

[redacted]

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（此页无正文，为《关于联泓新材料科技股份有限公司申请向特定对象发行股票的审核问询函的回复报告》之盖章页）

联泓新材料科技股份有限公司

2023 年 4 月 10 日



保荐人法定代表人声明

本人已认真阅读《关于[redacted]新材料科技股份有限公司申请向特定对象发行股票的审核问询函的回复报告》的全部内容，了解报告涉及问题的核查过程、本公司的内核和风险控制流程，