

# **China Sunsine Chemical Holdings Ltd**

Catch a right time to expand production

# SINGAPORE | MATERIALS | INITIATION

- Sunsine is the market leader in rubber accelerator industry, commanding 18% share of global production.
- We expect the current attractive rubber accelerator product spread to sustain for the next couple of years as supply continues to consolidate in China.
- Stringent environmental policies in China are phasing out smaller producers in favour of the leading producers such as Sunsine.
- Additional growth by capacity ramping by a third to 117k tonnes by 2020.
- We initiate a BUY call with a TP of S\$1.60 (FY18e PE: 10x).

# Background

China Sunsine (Sunsine) is the largest producer of rubber accelerators in the world and the largest producer of insoluble sulphur in China. It has a client base of more than 1,000, including two-third of the top 75 global tyre manufacturers. By 2018, Sunsine annual capacity is expected to reach 172k tonnes (+6%).

China has dominated the rubber chemical market. As of 2015, total production of rubber chemicals in China reached 1.1mn tonne, accounting for 76% of the global output. Production from 47 companies took up more than 80% of the domestic volume.

# **Investment Thesis**

**Healthy demand from tyre industry.** 90% of the consumption of rubber chemicals is associated with the automobile industry, predominantly in the production of car tyres. The consumption ratio of rubber chemicals to rubber is 6:100. Global tyre production is expected to grow from 2.2bn in 2017 to 2.7bn in 2020 with CAGR of 3.4% during the period. Meanwhile, total global production of rubber chemical is expected to reach 1.8mn tonnes by 2020, delivering a CAGR of 3.5% from 2015 to 2020.

**Supply short and upswing prices of raw materials drove market prices to surge:** In 2016, supply-side reform initiatives in China began phasing out environmentally obsolete capacity. Consequently, shortage began to appear as quality producers were not able to make up the demand gap. The average export price of aniline, the main material of rubber chemicals, was on course for recovery with 33% growth in recent two years and the average domestic price soared by 131% during the period.

**Existing leading companies will consolidate further the market:** Three main factors will result in a more consolidated market in the foreseeable future:

- 1. Stringent environmental requirements are raising the entry barrier, restricting new capacity and phasing out small mills in China.
- 2. Cost of switching supply source supply is high for tyre producers, especially global brands, resulting from due diligence on suppliers for a high standard of environmental protection and product specification.
- 3. The market leaders have superior production techniques, wider client base and better waste processing.

### **Investment Actions**

Based on a required rate of return of 7.9%, sustainable growth rate of 1%, and FX (SGD/RMB) of 4.85, we derive a TP of S\$1.60 (FY18e PE: 10x) by free cash flow to equity (FCFE) valuation method and initial a BUY call with an upside of 44.4%.



# 29 January 2018

BUY (Initiation)	
CLOSING PRICE	SGD 1.110
FORECAST DIV	SGD 0.026
TARGET PRICE	SGD 1.600
TOTAL RETURN	46.5%

# COMPANY DATA

Bloomberg Code:	CSSC SP
O/S SHARES (MN) :	492
MARKET CAP (USD mn / SGD mn) :	418/546
52 - WK HI/LO (SGD) :	1.12 / 0.51
3M Average Daily T/O (mn) :	0.72

#### **MAJOR SHAREHOLDERS (%)**

SUCCESS MORE GROUP	59.7%
CHOON KONG KOH	0.9%
CHENG QIU XU	0.6%

#### PRICE PERFORMANCE (%)

	1M TH	3 M T H	1Y R
COMPANY	25.0	14.0	115.1
STIRETURN	5.5	7.2	21.3



#### Source: Bloomberg, PSR

#### **KEY FINANCIALS**

Y/E Dec, RMB mn	FY 16	FY 17e	FY 18 e	FY 19 e
Revenue	2,037	2,939	3,221	3,582
Gross profit	547	782	863	949
PAT	222	344	381	421
P/E (x)	5.0	7.4	7.0	6.3
P/B (x)	0.8	1.5	1.3	11
ROE (%)	16%	20%	18%	18%
ROA (%)	13%	16%	16%	15%
Source: PSR				

#### VALUATION METHOD

FCFE (Cost of Equity: 7.9%; Terminal g: 1.0%)

Chen Guangzhi chengz@phillip.com.sg (+65 6212 1859)

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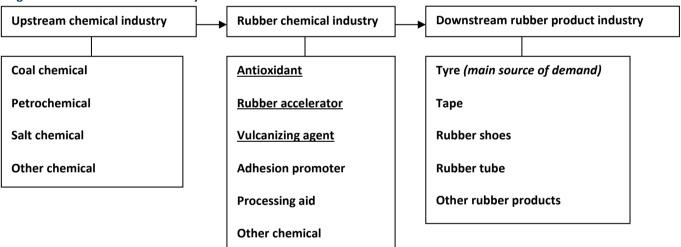
# **Company Background**

- Established in 1977 in China, Sunsine was listed in SGX in 2007.
- The company is the largest producer of rubber accelerators in the world and the largest producer of insoluble sulphur in China.
- It is engaged in the production of specialty chemical, rubber accelerators, antioxidant, and insoluble sulphur. Meanwhile, it also produces and supplies heating power for internal usage and to external customers.
- With 40 types of product mix, Sunsine has achieved a leading position in specialty rubber chemical market. The client base expanded to be more than 1,000, including 65% of the top 75 tyre manufacturers.
- The production plants are located in Shanxian, Weifang and Dingtao in Shandong Province in China.
- By 2017, it is expected the total annual capacity to reach 152k tonnes, comprising of 87k tonnes of rubber accelerators, 45k tonnes of antioxidant, and 20k tonnes of insoluble sulphur.

# **Investment Thesis**

# Overview of rubber chemical sector

Rubber chemicals, also called rubber additives, are ingredients used to blend into either natural or synthetic rubber to produce rubber products that can possess various properties such as antioxidation, antidegradation and extension of lifespan. It is an indispensable intermediate that improves technique and quality in the process of production of rubber products, shown in Figure 1.



#### Figure 1: Rubber chemical industry chain

\*The underscored chemicals are China Sunsine's major product mix Source: chyyxx.com, PSR

The raw materials of rubber chemicals comprise of aniline, carbon disulphide, hydrogen peroxide and morpholine. Aniline is the key chemical that is used for the production of antioxidant and rubber accelerator. Theoretically, aniline consumption ranges from 50% to 70% of per unit production of antioxidant and accelerator. Therefore, the price of it substantially affects the overall cost of production.

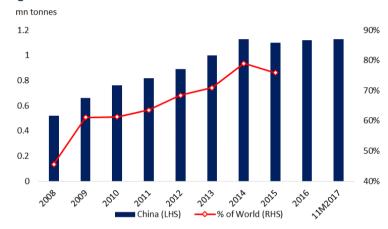
90% of the consumption of rubber chemicals is associated with the automobile industry, and 70% of the output is used for the production of car tyres, which consumes 70% of global rubber output averagely. The consumption ratio of rubber chemicals to rubber is 6:100. Therefore, the supply of car tyre markedly drives the demand for rubber chemicals.

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### China has become the biggest rubber chemical market and expected to consolidate

Over the past 10 years, China has been taking the lead in this niche market. See Figure 2, total production of rubber chemicals in China arrived at 520k tonnes, taking up 45.6% of the global volume in 2008. Since 2013, domestic production surpassed 1mn tonnes along with more than 70% of global market share. In the recent four years, the total output maintained at above 1.1mn tonnes, and the market share stabilised at c.75%. It is worth noting that more than 80% of the output come from 47 members of China Rubber Industry Association Rubber Chemical Committee. According to China Rubber Industry Association, as of 2016, gross industry output value of rubber chemical sector grew by 5.1% YoY to RMB19.2bn, and total sales grew by 7.4% YoY to RMB18.8bn in 2016. During the period, sales generated by top 5 companies, shown in Figure 3, accounted for more than 40% of the whole industry sales. Sales from top 20 companies out of over 100 peers took up more than 80% of market share. In a nutshell, the sector is trending to be consolidated, favouring the existing market leaders to maintain or even expand their market shares.

Figure 2: Production volume of rubber chemical in China dominates the world



Source: China rubber industry yearbook 2015-2016, cria.org.cn, PSR

# Figure 3: Top 5 rubber chemical companies in 2016 (sorted by sales)

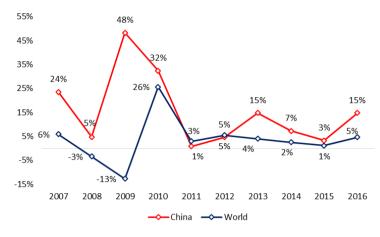
Company	Sales (RMB bn)
Sinorgchem Technology	Above 2
China Sunsine (listed)	Above 2
Kemai Chemical Technical	1 to 2
Yanggu Huatai Chemical (listed)	1 to 2
Puyang Willing Chemicals	0.5 to 1
Source: chyyxx.com, PSR	

#### Sustainable growth of auto and tyre demand underpins the sector prosperity

According to Organisation Internationale des Constructeurs d'Automobiles (OICA), also called International Organization of Motor Vehicle Manufacturers, China has become the fastest growing countries in the development of auto industry, see Figure 4. As of 2016, total car production in China reached 28mn units, representing a 15% YoY growth that outperformed the global 5% YoY growth. Meanwhile, the number of vehicle in use (VIU) in China has been maintaining at an over 10% annual growth for the last decade, which delivered a CAGR of 18%, shown in Figure 5. Apart from tyres being equipped with the newly built cars and vehicles, other car accessories such as tubes, dampers, and brake pads are also sources of consumption of rubber and rubber chemicals. The expanding volume of VIU that increasingly require recurring replacement tyres and components also drives it. In 2005, China surpassed US and became the top tyre producer globally along with the domestic tyre production arriving at 250mn units. During the last decade, China has also been the largest tyre consumer and exporter in the world. Shown in Figure 6, tyre production generated a CARG of 8%. It is expected that the volume will reach a new high of 635mn with 4.1% YoY growth in 2017.

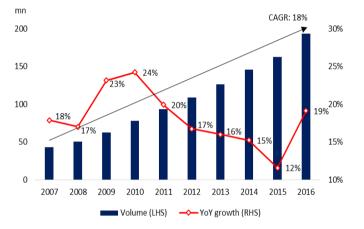


## Figure 4: Growth of China auto production outpaced the world



Source: OICA, PSR





Source: OICA, Traffic Management Bureau of the Public Security Ministry, PSR

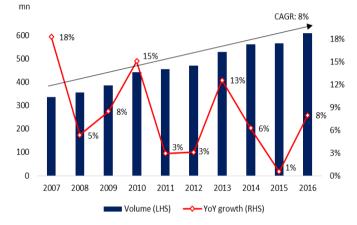
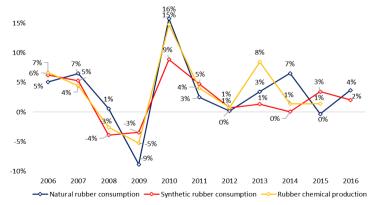


Figure 6: Tyre production grew moderately in China

Source: China rubber industry yearbook 2015-2016, cria.org.cn, PSR

As discussed earlier, rubber chemical demand is proportionally correlated to the consumption of both natural and synthetic rubber. As shown in Figure 7, the growth of global rubber chemical production is in line with that of both natural and synthetic rubber consumption. Moving forward, global tyre production is expected to grow from 2.2bn in 2017 to 2.7bn in 2020 with CAGR of 3.4% during the period. Meanwhile, total global production of rubber chemical is expected to reach 1.8mn tonnes by 2020, delivering a CAGR of 3.5% from 2015 to 2020.



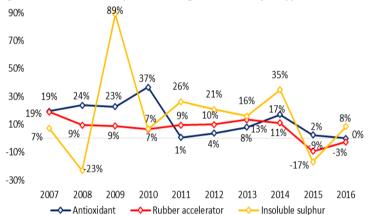


Source: IRSG, China rubber industry yearbook 2015-2016, PSR



# Supply short and upswing prices of raw materials drove market prices to surge

As shown in Figure 8, antioxidant, rubber accelerator, and insoluble sulphur, three main types of rubber chemicals, developed steadily during the post-global financial crisis period before 2014. It was the golden era for domestic rubber chemical sector in China. During the period, new entrants sprang up in China, catering to increasing demand resulting from the recovery of the tyre industry, while major foreign producers, namely Flexsys, Lanxess, and Agrofert, gradually reduce capacity owing to the withering cost and technique advantages. Though China overtook other countries, becoming the market leader in the sector, overcapacity started to worsen domestically in 2014. The enactment of the new Environmental Protection Law in Jan-15 stroke the market, forcing a widespread shutdown of those mills who failed to meet environmental standards. In 2016, supply-side reform initiatives in China further reshaped the market structure: environmentally obsolete capacities were gradually phased out, and supply ran short subsequently since those quality producers whose capacity were nearly fully utilised were not able to make up the demand gap.





In recent years, aniline market also encountered overcapacity, see Figure 9. Since 2015, impacted by tightened environmental policies, destocking, and expanding export (shown in Figure 10), aniline market had been restructuring amid slow growth. Shown in Figure 11, the average export price of aniline was on the course of recovery with 33% growth in recent two years. During the period, the average domestic price soared by 131% from RMB5,400/tonne to RMB12,500/tonne.

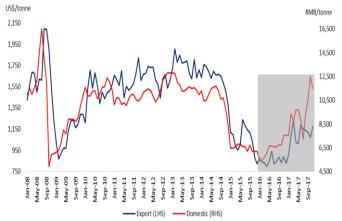
Shortage of supply led to a spike of rubber chemical prices from 2016 to 2017. The price growths of four types of rubber accelerators ranged from 15% to 30% during the period, shown in Figure 12. Moving forward, new rubber chemicals capacity will commence operation in 2018; the supply shortage will be contained. As a result, the price growth will slow down this year.

Source: China rubber industry year book 2015-2016, cria.org.cn, PSR



Figure 9: Overcapacity of aniline is being mitigated 000' tonnes 4,000 3,500 3,000 2,500 2,000 1.500 1.000 500 0 2009 2011 2012 2013 2014 2015 2016 2007 2008 2010 Production Capacity

Source: China Petroleum and Chemical Industry Federation, PSR

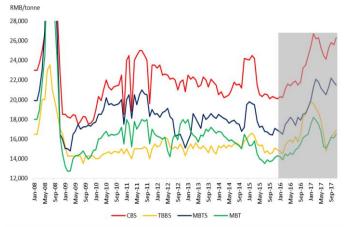


# Figure 11: Price rally of aniline in recent 2 years



2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Source: China Petroleum and Chemical Industry Federation, PSR





Source: China Petroleum and Chemical Industry Federation, china.chemcp.com, PSR Source: China Petroleum and Chemical Industry Federation, PSR

#### Existing leading companies will reinforce the position amid market consolidation

With decades of development, rubber chemical industry in China has reached a mature stage after going through ramp-up of capacity, expansion of product mix, and improvement of techniques. At present, less than 50 domestic companies provide more than 80% of the total supply. In other words, these companies have dominated not just the domestic market but global market as well. Three main factors result in a more consolidated market in the foreseeable future:

- 1. Stringent environmental requirements are raising the entry barrier, restricting new capacity and phasing out small mills in China.
- 2. The cost of switching source of supply is high for tyre producers, especially global brands, resulting from due diligence on suppliers for a high standard of environmental protection and product specification.
- 3. The market leaders have cutting edges in production techniques, client base, and waste processing.

To ease the tight supply, we expect the industry to expand capacity by 6% from 2018 to 2019. However, the expansion will come from the existing market leaders. In a nutshell, the leaders will benefit more as the market consolidates.

# Figure 10: From net import to net export of aniline

# **Investment Merits**

# Proven track record of stable profitability with new ramp-up of capacity

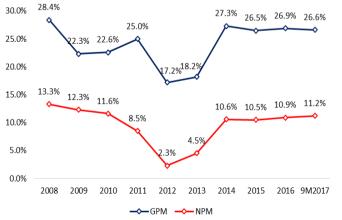
With a 40 year operating history, the company has grown into the second largest rubber chemical producer in terms of sales in China as of 2016. Currently, it has established clients base who have considered Sunsine as a key long-term supplier, shown in Figure 13. Top 20 and 30 clients contribute over 40% and 70% of total turnover respectively.

As of 2016, Sunsine commands 18% and 31% of the world's and China's market share of rubber accelerator production. Over the years, the company has managed to deliver stable performance. In 2012 and 2013, domestic market encountered headwinds like intense price competition due to overcapacity, resulting in an abnormal drop in profitability. On average, the company managed to deliver 25% gross profit margin (GPM) and 11% net profit margin (NPM), shown in Figure 14. Generally, Sunsine's gross profit (GP)/tonne tracks the market spread (price of rubber accelerators - price of aniline), shown in Figure 15. The deviation in 2015 and 2016 was owing to the production growth differentials. In 4Q17, the aniline price surged higher while the rubber chemical producers did not uplift selling price immediately. Usually, the market will take 1 or 2 months to adjust the markups accordingly. Nonetheless, the spread is 30%+ more in 2017 than in 2016. Sunsine managed to deliver 5% YoY and 18.5% YoY output growth of rubber accelerator respectively while total production growth within the sector dropped by 9% YoY and 3% YoY during the period. Moving forward, it is expected that Sunsine will maintain GPM of 27% and NPM of 12% amid the consolidation of supply in China.

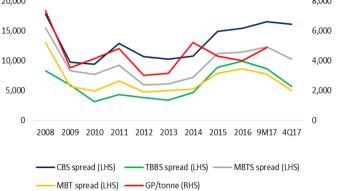












Source: China Petroleum and Chemical Industry Federation, chemcp.com, PSR

#### Source: Company, PSR

Sunsine had set the mid-term capacity target by the 13<sup>th</sup> Five-Year Plan (end of 2020) as





follows:

- Rubber accelerators 117k tonnes
- Antioxidant 45k tonnes
- Insoluble sulphur 30k tonnes

In 2018, the newly-added capacity (shown in Figure 16) are expected to be in operation. The targets for antioxidant and insoluble will be achieved and one-third of the 30k tonnes TBBS capacity expansion program will be accomplished in 2018. It is expected the remaining 20k tonnes to be from 2019 to 2020.

	!	<u> </u>	-				
	<b>Rubber accelerator</b>		Antio	xidant	Vulcanizi	ng agent	
	Increment	FY18e		FY18e		Increment	FY18e
TBBS	10	35	6PPD	30	Insoluble sulphur	10	30
MBT	-	5	TMQ	10			
MBTS	-	15	IPPD	5			
CBS	-	22					
DCBS	-	8					
TMTD	) -	4					
DPG	-	8					
Total		97		45			30

Source: Company, PSR

# Sunsine has been heavily investing in environmental equipment

From 2012 to 2016, Sunsine's capex on environmental protection totalled at RMB272mn. The recycle rate of waste water improved from 10% in 2012 to 87% in 2016. The conversion recovery rate of sulphur oxides was consistently above 99.5%, whereby the production cost dropped by RMB15mn respectively in 2015 and 2016. As of 2016, the capacity of solid waste treatment arrived at 30k tonnes.

Over the years, a reason Sunsine managed to maintain downstream corporate customers, especially top International tyre manufacturers, is their compliance to the increasingly high standard of environmental protection and waste discharge. These multinational corporations will conduct due diligence on the supplier before securing the supply contracts. Since Sunsine has established the sustainable relationships of cooperation with them, it is proved to meet their requirements consistently.

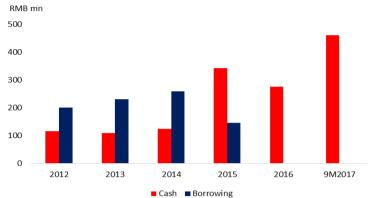
Sunsine has thrived during these rounds of market restructuring and transformation resulted from more stringent requirements of environmental protection domestically in recent years. Currently, the company is capable of taking advantage of market headwinds, as it constantly put efforts on environmental investments such as waste water treatment, solid waste treatment, and exhaust gas recycling facilities.

#### Clean balance sheet with large cash hoard



As of 3Q17, Sunsine had cash in hand amounting to RMB463mn. The remaining capex of Phase I of 10k-tonne capacity TBBS plant, 10k-tonne of insoluble sulphur plant, and a new heating plant, will be c.RMB100mn which is fully funded internally.

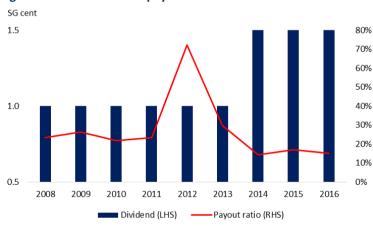




Source: Company, PSR

# Expected higher dividend payout in FY17 and FY18

See Figure 17, Sunsine has a consistent stable dividend payout policy. Even when the company had significant expenditure such as the one-off R&D cost for 6PPD amounted to RMB60mn in 2012, it maintained the dividend payout at 1 SG cent. Since 2014, the company has increased the dividend to 1.5 SG cents, but the payout ratio dropped below 20% due to the substantial growth of bottom line. Management has announced that the payout ratio will not be less than 20% in FY17 and FY18. As of 9M17, the net profit arrived at RMB209mn (FY16: RMB222mn). Therefore, the dividend for FY17 is expected to peak in history.



### Figure 18: Stable dividend payout

Source: Company, PSR



# How Do We View China Sunsine?

In the short run, China Sunsine will see the 10% to 20% growth in both top line and bottom line, resulting from the ramp-up of capacity and stable profitability. However, we expect more frequent environmental inspection from the authorities in the next couple of years since pollution control is one of the main themes of the 13<sup>th</sup> Five Year Plan. Temporary stopwork may impact the daily operation. As long as the company continues to implement rigid waste discharge and emission control and environmental protection measures, it will keep the business on the run. In the long run, It is expected that the leading market position will be further strengthened as the ongoing industry consolidation will contract the number of producers in the niche market. For Sunsine, this is an opportunity to expand the market share throughout organic growth from new self-built capacity or inorganic growth from acquisitions. In other words, horizontal integration will benefit the company.

# **Key Assumptions**

We forecast the capacity-weighted average price based on the market average price and updated capacity of each product. We expect the average market price will rise by 2% per annum in 2018 and 2019. We derive the sales volume based on the estimated utilisation rate of each product category and the given capacity.

#### Figure 19: Estimation of capacity-weighted average price

Average price	Capacity	Capcity weighted average	Average price	Capacity	Capcity weighted average	Average price	Capacity	Capcity weighted average
(RMB/tonne)	(Tonne)	price (RMB/tonne)	(RMB/tonne)	(Tonne)	price (RMB/tonne)	(RMB/tonne)	(Tonne)	price (RMB/tonne)
FY17	FY17	FY17	FY18e	FY18e	FY18e	FY19e	FY19e	FY19e
21,000	5,000	1,207	21,420	5,000	1,104.12	21,848	5,000	1,020.95
18,000	15,000	3,103	18,360	15,000	2,839.18	18,727	15,000	2,625.31
22,000	22,000	5,563	22,440	22,000	5,089.48	22,889	22,000	4,706.11
26,000	25,000	7,471	26,520	35,000	9,569.07	27,050	45,000	11,376.34
26,000	8,000	2,391	26,520	8,000	2,187.22	27,050	8,000	2,022.46
18,000	4,000	828	18,360	4,000	757.11	18,727	4,000	700.08
26,000	8,000	2,391	26,520	8,000	2,187.22	27,050	8,000	2,022.46
	87,000	22,954		97,000	23,733		107,000	24,474
17,800	10,000	3,956	18,156	10,000	4,035	18,519	10,000	4,115
23,000	30,000	15,333	23,460	30,000	15,640	23,929	30,000	15,953
22,100	5,000	2,456	22,542	5,000	2,505	22,993	5,000	2,555
	45,000	21,744		45,000	22,179		45,000	22,623
11,800	20,000	11,800	12,036	30,000	12,036	12,277	30,000	12,277
	(RMB/tonne) FY17 21,000 18,000 22,000 26,000 26,000 18,000 26,000 17,800 23,000 22,100	(RMB/tonne) (Tonne)   FY17 FY17   21,000 5,000   18,000 15,000   22,000 22,000   26,000 25,000   26,000 8,000   18,000 4,000   26,000 8,000   18,000 4,000   26,000 8,000   17,800 10,000   23,000 30,000   22,100 5,000	(RMB/tonne) (Tonne) price (RMB/tonne)   FY17 FY17 FY17   21,000 5,000 1,207   18,000 15,000 3,103   22,000 22,000 5,563   26,000 25,000 7,471   26,000 8,000 2,391   18,000 4,000 828   26,000 8,000 2,391   18,000 4,000 828   26,000 8,000 2,391   18,000 3,000 3,956   23,000 30,000 15,333   22,100 5,000 2,456   45,000 21,744 1,744	(RMB/tonne) (Tonne) price (RMB/tonne) (RMB/tonne)   FY17 FY17 FY17 FY18   21,000 5,000 1,207 21,420   18,000 15,000 3,103 18,360   22,000 22,000 5,563 22,440   26,000 25,000 7,471 26,520   26,000 8,000 2,391 26,520   18,000 4,000 828 18,360   26,000 8,000 2,391 26,520   18,000 4,000 828 18,360   26,000 8,000 2,391 26,520   18,000 4,000 828 18,360   26,000 8,000 2,391 26,520   17,800 10,000 3,956 18,156   23,000 30,000 15,333 23,460   22,100 5,000 2,456 22,542   45,000 21,744 45,000 21,744	(RMB/tonne) (Tonne) price (RMB/tonne) (RMB/tonne) (Tonne)   FY17 FY17 FY17 FY17 FY18 FY18e   21,000 5,000 1,207 21,420 5,000   18,000 15,000 3,103 18,360 15,000   22,000 22,000 5,563 22,440 22,000   26,000 25,000 7,471 26,520 8,000   26,000 8,000 2,391 26,520 8,000   26,000 8,000 2,391 26,520 8,000   18,000 4,000 828 18,360 4,000   26,000 8,000 2,391 26,520 8,000   17,800 10,000 3,956 18,156 10,000   23,000 30,000 15,333 23,460 30,000   22,100 5,000 2,456 22,542 5,000	(RMB/tonne)(Tonne)price (RMB/tonne)(RMB/tonne)(Tonne)price (RMB/tonne)FY17FY17FY17FY18FY18eFY18e21,0005,0001,20721,4205,0001,104.1218,00015,0003,10318,36015,0002,839.1822,00022,0005,56322,44022,0005,089.4826,00025,0007,47126,52035,0009,569.0726,0008,0002,39126,5208,0002,187.2218,0004,00082818,3604,000757.1126,0008,0002,39126,5208,0002,187.2218,0004,0003,95618,15610,0004,03523,00030,00015,33323,46030,00015,64022,1005,0002,45622,5425,0002,50545,00021,74445,00022,179	(RMB/tonne)(Tonne)price (RMB/tonne)(RMB/tonne)(Tonne)price (RMB/tonne)(RMB/tonne)FY17FY17FY17FY17FY18eFY18eFY18eFY18eFY19e21,0005,0001,20721,4205,0001,104.1221,84818,00015,0003,10318,36015,0002,839.1818,72722,00022,0005,56322,44022,0005,089.4822,88926,00025,0007,47126,52035,0009,569.0727,05026,0008,0002,39126,5208,0002,187.2227,05018,0004,00082818,3604,000757.1118,72726,0008,0002,39126,5208,0002,187.2227,05017,80010,0003,95618,15610,0004,03518,51923,00030,00015,33323,46030,00015,64023,92922,1005,0002,45622,5425,0002,50522,99345,00021,74445,00022,17921,74445,00022,179	(RMB/tonne)(Tonne)price (RMB/tonne)(RMB/tonne)(Tonne)price (RMB/tonne)(RMB/tonne)(Tonne)FY17FY17FY17FY17FY18eFY18eFY18eFY18eFY18eFY19e21,0005,0001,20721,4205,0001,104.1221,8485,00018,00015,0003,10318,36015,0002,839.1818,72715,00022,00022,0005,56322,44022,0005,089.4822,88922,00026,00025,0007,47126,52035,0009,569.0727,05045,00026,0008,0002,39126,5208,0002,187.2227,0508,00018,0004,00082818,3604,000757.1118,7274,00026,0008,0002,39126,5208,0002,187.2227,0508,00018,0004,00022,95497,00023,733107,00017,80010,0003,95618,15610,0004,03518,51910,00023,00030,00015,33323,46030,00015,64023,92930,00022,1005,00024,5622,5425,0002,50522,9935,00045,00021,74445,00022,17945,000

Source: China Petroleum and Chemical Industry Federation, chemcp.com, Company, PSR

#### Figure 20: Estimation of sales volume

Sales	volume (To	nne)	
	FY17e	FY18e	FY19e
Accelerator	82,650	87,300	96,300
Antioxidant	33,750	33,750	36,000
Insoluble sulphur	23,000	30,000	30,000
Source: PSR			



# **Valuation Methodology**

Not only has Sunsine been delivering stable positive cash flows over the years and, but also does it not have borrowings. We use discounted cash flow (DCF) which is based on free cash flow to equity (FCFE) as the valuation method to value Sunsine.

Y/E, RMB mn	FY17e	FY18e	FY19e
Revenue	344	381	421
Net income	190	90	94
Chang in net WC	51	46	46
Change in borrowing	-	-	-
FCFE	103	245	281
Beta	0.98		
Required rate of retur	7.9%		
Growth	1.0%		
FX (SGD/RMB)	4.85		
TP (SGD)	1.60		

We initiate a BUY call with a TP of S\$1.60 for FY18.

# **Investment Risks**

Here we list the key risks:

Risks	Remarks
	Upside
Selling and raw material price	Sunsine operates on a pass-through mechanism. When raw material prices increase, it will also pass the markup on to clients. Thus, higher market prices of both will enhance the absolute gains given the margins
Capacity	The ramp-up of capacity caters to the increasing market demand.
Foreign exchange	The strengthened USD will bring foreign exchange gains since one-third of the output are exported.
Policy	Stringent environmental regulations phase out some market players, and Sunsine will take advantage of it to gain more market shares.
	Downside
Selling and raw material price	Given the margins are stable, lower prices will reduce the absolute gains The existing capacity is insufficient to meet market demand, and
Capacity	production may overrun.
Foreign exchange	The weakened USD will bring foreign exchange losses.
Policy	Frequent environmental inspection may cause temporary stop work.

# Peer comparison

# Figure 23: Peer comparison

Company	Bloomberg	Mkt Cap	EV (SGD mn)	EV/EBITDA	P/E	P/B	Net D/E	ROA	ROE
	Ticker	(SGD mn)		TTM			(%)	(%)	(%)
China Sunsine Chemical Holdings Ltd	CSSC SP	550.7	456.1	3.1	9.4	1.7	Net Cash	15.1	19.0
China									
Shandong Yanggu Huatai Chemical Co Ltd	300121 CH	834.2	913.9	19.9	24.0	5.1	72.6	11.3	23.7

Source: Bloomberg, PSR



# Appendix: Our visit to Sunsine plants in Oct-17

Figure 24: China Sunsine's headquarter in Shanxian county Shangdong province



Source: PSR

Figure 25: Hydrogen sulphide recycling facility



Source: PSR

Figure 27: 120m high chimney to exhaust gas



Source: PSR

Figure 26: Conversion of hydrogen sulphide into sulphur



\*The conversion recovery is above 99.95% Source: PSR

Figure 28: Odor collection facility



Source: PSR



# Figure 29: 10k-tonne capacity of insoluble sulphur under construction Figure 30: A new boiler under construction



Source: PSR

# Figure 31: Package of TMQ



Source: PSR



\*One operating boiler and one spared Source: PSR

#### Figure 32: Wrapped pack for shipment



\*20 bags in a pack Source: PSR



# **Financials**

Income	Statement
meonie	Statement

**Cash Flow** 

Y/E Dec, RMB mn	FY15	FY16	FY17e	FY18e	FY19e
Revenue	1,859	2,037	2,939	3,221	3,582
COGS	(1,367)	(1,490)	(2,157)	(2,358)	(2,633)
Gross profit	492	547	782	863	949
EBITDA	392	410	574	627	682
Depreciation & Amortisation	94	96	96	98	98
EBIT	298	314	478	529	584
Net Finance (Expense)/Inc	(10)	(4)	-	-	-
РВТ	288	310	478	529	584
Taxation	(92)	(88)	(134)	(148)	(164)
РАТ	195	222	344	381	421

Per share data					
Y/E Dec	FY15	FY16	FY17e	FY18e	FY19e
EPS (RMB cents)	41.9	47.7	70.0	77.4	85.5
EPS (SG cents)	9.3	10.0	15.0	16.0	17.6
DPS (SG cents)	1.5	1.5	2.3	2.6	3.0
BVPS (RMB)	2.5	2.9	3.6	4.2	4.9
BVPS (SGD)	0.6	0.6	0.8	0.9	1.0

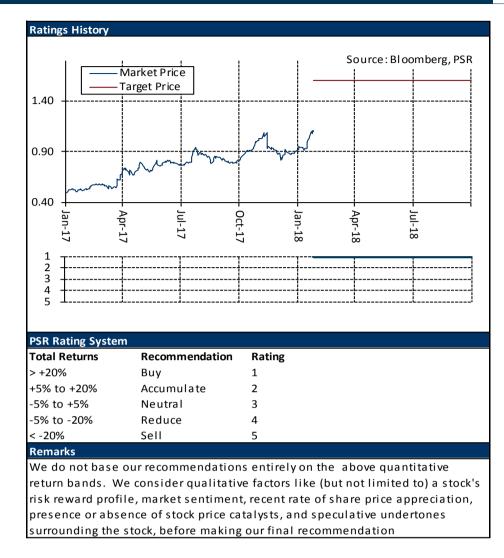
Balance Sheet					
Y/E Dec, RMB mn	FY15	FY16	FY17e	FY18e	FY19e
ASSETS					
PP&E	563	549	644	637	634
Others	44	43	41	40	39
Total non-current assets	606	592	685	677	673
Cash	341	276	525	804	1,113
Inventories	142	145	175	208	225
Trade receivables	414	548	596	607	642
Others	83	82	106	127	152
Total current assets	979	1,051	1,402	1,747	2,132
Total Assets	1,586	1,642	2,088	2,424	2,805
LIABILITIES					
Trade payables	43	52	80	78	83
Borrowings	145	-	-	-	-
Others	223	229	259	285	331
Total current liabilities	411	281	338	362	414
Borrowings	-	-	-	-	-
Total non-current liabilities	-	-	-	-	-
Total Liabilities	411	281	338	362	414
Total Equity	1,175	1,362	1,749	2,062	2,392

Y/E Dec, RMB mn	FY15	FY16	FY17e	FY18e	FY19e			
CFO								
РВТ	288	310	478	529	584			
Adjustments	102	103	97	100	100			
WC changes	133	(124)	(51)	(46)	(46)			
Cash generated from ops	523	288	524	582	638			
Others	(93)	(85)	(134)	(148)	(164)			
Cashflow from ops	430	203	390	434	475			
CFI								
CAPEX, net	(50.8)	(82.0)	(190.0)	(90.0)	(94.0)			
Others	1.2	2.4	3.8	4.0	4.2			
Cashflow from investments	(50)	(80)	(186)	(86)	(90)			
CFF								
Loans, net of repayments	(120)	(148)	-	-	-			
Dividends	(32)	(33)	(47)	(69)	(76)			
Others	(0)	(8)	93	-	-			
Cashflow from financing	(152)	(189)	47	(69)	(76)			
Net change in cash	229	(65)	251	279	309			
Effects of exchange rate	(0)	-	-	-	-			
Ending cash	340	274	525	804	1,113			
C C DI 1111 C 111	Courses (Courses) Dhillin Courseting Descende (Cineses) Estimates							

Source: Company, Phillip Securities Research (Singapore) Estimates

Valuation Ratios					
Y/E Dec	FY15	FY16	FY17e	FY18e	FY19e
P/E (x)	3.9	5.0	7.4	7.0	6.3
P/B (x)	0.7	0.8	1.5	1.3	1.1
EV/EBITDA	1.5	2.1	3.7	2.9	2.2
Growth & Margins (%)					
Growth					
Revenue	-10%	11%	43%	10%	10%
Gross profit	-13%	11%	43%	10%	10%
EBIT	-7%	5%	52%	11%	10%
PAT	-11%	14%	55%	11%	10%
Margins					
GP margin	26%	27%	27%	27%	27%
EBIT margin	16%	15%	16%	16%	16%
PAT margin	11%	11%	12%	12%	12%
Key Ratios					
ROE (%)	17%	16%	20%	18%	18%
ROA (%)	12%	13%	16%	16%	15%
Net Debt or (Net Cash)	(196)	(276)	(525)	(804)	(1,113)
Gearing (%)	9.1%	0.0%	0.0%	0.0%	0.0%







#### Head of Research

Paul Chew – paulchewkl@phillip.com.sg

Consumer | Healthcare Soh Lin Sin - <u>sohls@phillip.com.sg</u>

Transport | REITs (Industrial) Richard Leow - <u>richardleowwt@phillip.com.sg</u>

Banking and Finance Jeremy Teong - jeremyteongfh@phillip.com.sg

#### SINGAPORE Phillip Securities Pte Ltd

Raffles City Tower 250, North Bridge Road #06-00 Singapore 179101 Tel +65 6533 6001 Fax +65 6535 6631 Website: www.poems.com.sg

#### JAPAN

Phillip Securities Japan, Ltd. 4-2 Nihonbashi Kabuto-cho Chuo-ku, Tokyo 103-0026 Tel +81-3 3666 2101 Fax +81-3 3666 6090 Website: www.phillip.co.jp

#### THAILAND

Phillip Securities (Thailand) Public Co. Ltd 15th Floor, Vorawat Building, 849 Silom Road, Silom, Bangrak, Bangkok 10500 Thailand Tel +66-2 6351700 / 22680999 Fax +66-2 22680921 Website www.phillip.co.th

#### UNITED STATES Phillip Capital Inc

141 W Jackson Blvd Ste 3050 The Chicago Board of Trade Building Chicago, IL 60604 USA Tel +1-312 356 9000 Fax +1-312 356 9005 Website: www.phillipusa.com

#### INDIA

PhillipCapital (India) Private Limited No.1, 18th Floor, Urmi Estate 95, Ganpatrao Kadam Marg Lower Parel West, Mumbai 400-013 Maharashtra, India Tel: +91-22-2300 2999 / Fax: +91-22-2300 2969 Website: www.phillipcapital.in

#### CAMBODIA Phillip Bank Plc

Ground Floor of B-Office Centre,#61-64, Norodom Blvd Corner Street 306,Sangkat Boeung Keng Kang 1, Khan Chamkamorn, Phnom Penh, Cambodia Tel: 855 (0) 7796 6151/855 (0) 1620 0769 Website: www.phillipbank.com.kh **Contact Information (Singapore Research Team)** 

**Oil & Gas | Energy** Chen Guangzhi - <u>chengz@phillip.com.sg</u>

REITs (Commercial, Retail, Healthcare) | Property Dehong Tan - <u>tandh@phillip.com.sg</u>

US Equity Ho Kang Wei - <u>hokw@phillip.com.sg</u>

#### Contact Information (Regional Member Companies) MALAYSIA Phillip Capital Management Sdn Bhd B-3-6 Block B Level 3 Megan Avenue II,

No. 12, Jalan Yap Kwan Seng, 50450 Kuala Lumpur Tel +603 2162 8841 Fax +603 2166 5099 Website: www.poems.com.my

> INDONESIA PT Phillip Securities Indonesia ANZ Tower Level 23B, JI Jend Sudirman Kav 33A Jakarta 10220 – Indonesia Tel +62-21 5790 0800 Fax +62-21 5790 0809 Website: www.phillip.co.id

#### FRANCE

King & Shaxson Capital Limited 3rd Floor, 35 Rue de la Bienfaisance 75008 Paris France Tel +33-1 45633100 Fax +33-1 45636017 Website: www.kingandshaxson.com

# AUSTRALIA

Phillip Capital Limited Level 10, 330 Collins Street Melbourne, Victoria 3000, Australia Tel +61-03 9629 8288 Fax +61-03 9629 8882 Website: www.phillipcapital.com.au

#### TURKEY

PhillipCapital Menkul Degerler Dr. Cemil Bengü Cad. Hak Is Merkezi No. 2 Kat. 6A Caglayan 34403 Istanbul, Turkey Tel: 0212 296 84 84 Fax: 0212 233 69 29 Website: www.phillipcapital.com.tr

# **Research Operations Officer**

Mohamed Amiruddin - amiruddin@phillip.com.sg

**Macro** Pei Sai Teng - <u>peist@phillip.com.sg</u>

Technical Analysis Jeremy Ng - jeremyngch@phillip.com.sg

> HONG KONG Phillip Securities (HK) Ltd 11/F United Centre 95 Queensway Hong Kong Tel +852 2277 6600 Fax +852 2868 5307 Websites: www.phillip.com.hk

#### CHINA

Phillip Financial Advisory (Shanghai) Co Ltd No 550 Yan An East Road, Ocean Tower Unit 2318, Postal code 200001 Tel +86-21 5169 9200 Fax +86-21 6351 2940 Website: www.phillip.com.cn

UNITED KINGDOM King & Shaxson Capital Limited 6th Floor, Candlewick House, 120 Cannon Street, London, EC4N 6AS Tel +44-20 7426 5950 Fax +44-20 7626 1757 Website: www.kingandshaxson.com

#### SRI LANKA

Asha Phillip Securities Limited 2<sup>nd</sup> Floor, Lakshmans Building, No. 321, Galle Road, Colombo 03, Sri Lanka Tel: (94) 11 2429 100 Fax: (94) 11 2429 199 Website: www.ashaphillip.net

#### DUBAI

Phillip Futures DMCC Member of the Dubai Gold and Commodities Exchange (DGCX) Unit No 601, Plot No 58, White Crown Bldg, Sheikh Zayed Road, P.O.Box 212291 Dubai-UAE Tel: +971-4-3325052 / Fax: + 971-4-3328895



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