

# Tatva Chintan Pharma Chem

**A BREATH OF FRESH AIR**



**A play on tightening  
emission norms**

**Revenue/PAT CAGR  
expected at 34%/41%  
over FY21-24E**

**Initiate with BUY &  
TP of INR 2,650/share,  
implying 26% upside**

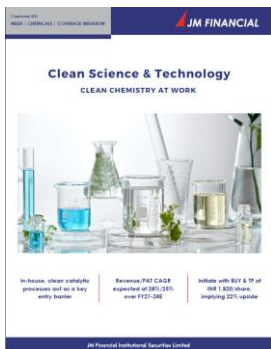
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*TCPL's Structure directing agents (SDAs) are made using the electrolysis process, which is considered to be green. Given the functionally critical nature of SDAs from customers' perspective, there is a strong barrier to entry (customer approval takes ~5-7 years) and high degree of customer stickiness. Due to further tightening of environmental norms and further applications, demand for SDAs is likely to get a further boost. Being the only commercial manufacturer out of India and second largest in the world for SDAs, we believe TCPL is well placed to benefit from this shift.*

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## Tatva Chintan Pharma Chem

### A Breath of Fresh Air

Tatva Chintan Pharma Chem Limited (TCPL) operates through 2 manufacturing facilities - Ankleshwar and Dahej - in Gujarat. TCPL is the largest and only commercial manufacturer of structure directing agents (SDAs) for zeolites in India and the second largest globally.

In addition, TCPL is also one of the leading global producers of an entire range of phase transfer catalysts (PTCs) in India and one of the key producers globally. TCPL's customers include Merck, Bayer, Asian Paints, Laurus Labs, Tosoh Asia, SRF, Navin Fluorine, among others. In FY19, FY20, and FY21, revenue generated from its top 10 customers represented 47%, 58%, and 60% of revenue from operations, respectively.

TCPL is currently in the process of further expansion at its Dahej facility. Plant testing and commissioning would start from Oct'22 while the commercial production is expected to commence in Nov'22. Hence, we expect the full ramp-up of additional capacities to start from 4QFY23.

We forecast Sales, EBITDA and EPS to post 34%, 44%, and 41% CAGR, respectively, over FY21-24E. Moreover, we expect its ROCE (pre-tax) to show continuous improvement and reach ~31% by FY24E. We initiate coverage on TCPL with a BUY rating and Mar'23 TP of INR 2,650/share (based on 40X Mar'24E EPS), implying 26% upside. Key risks: High dependency on R&D and introduction of innovative products, dependency on a limited number of customers and suppliers of certain raw materials.

**Play on tightening emission norms:** TCPL's SDAs are made using the electrolysis process, which is considered to be clean and green. Given the functionally critical nature of SDAs from customers' perspective, there is a strong barrier to entry (customer approval takes 5-7 years) and high degree of customer stickiness. The advanced chemistries also make it extremely difficult for new players to enter the market. These SDAs are used to control NOx emissions. Declining permissible NOx emissions limits could further boost SDA demand resulting in higher per vehicle usage of SDAs.

**Revenue/EBITDA/PAT CAGR expected at 34%/44%/41% over FY21-24E:** We expect TCPL's revenues to register a 34% CAGR over FY21-24E and reach INR 7.1bn by FY24E on the back of ramp-up of additional available capacities from i) expansions taken at Dahej in FY20 and ii) further expansion in FY22. The additional capacities should largely cater to the increasing demand of SDAs as SDA contribution would rise from INR 1.2bn in FY21 (40% of overall revenue) to INR 5.0bn in FY23E (69% of overall revenue). Due to a jump in SDA contribution and positive operating leverage, EBITDA margins are slated to rise from 21.9% in FY21 to 27% in FY24E. As a result, its EBITDA is likely to reach INR 2.0bn (a 44% CAGR over FY21-24E) and PAT is likely to reach INR 1.5bn (a 41% CAGR over FY21-24E).

**Initiate with BUY and TP of INR 2,650 per share:** Due to further tightening of environmental norms and further applications, demand for SDAs is likely to get a further boost. Being the only commercial manufacturer out of India and second largest in the world for SDA, we believe TCPL is well placed to benefit from this shift. We initiate coverage on TCPL with a BUY and Mar'23 TP of INR 2,650/share (based on 40X Mar'24E EPS). We believe TCPL's valuation premium (compared with other listed Indian specialty chemicals companies) is justified due to strong entry barriers offered by SDAs.

| Recommendation and Price Target |       | Financial Summary      |              |              |              |              |              | (INR mn) |
|---------------------------------|-------|------------------------|--------------|--------------|--------------|--------------|--------------|----------|
| Current Reco                    | BUY   | <b>Y/E March</b>       | <b>FY20A</b> | <b>FY21A</b> | <b>FY22E</b> | <b>FY23E</b> | <b>FY24E</b> |          |
| Current Price Target (12M)      | 2,650 | Net Sales              | 2,632        | 3,004        | 4,182        | 5,617        | 7,151        |          |
| Upside (%)                      | 26%   | Sales Growth (%)       | 27.6         | 14.1         | 39.2         | 34.3         | 27.3         |          |
|                                 |       | EBITDA                 | 550          | 657          | 1,015        | 1,492        | 1,957        |          |
|                                 |       | EBITDA Margin (%)      | 20.9         | 21.9         | 24.3         | 26.6         | 27.4         |          |
|                                 |       | Adjusted Net Profit    | 378          | 523          | 859          | 1,136        | 1,476        |          |
|                                 |       | Diluted EPS (INR)      | 18.8         | 26.0         | 38.8         | 51.2         | 66.6         |          |
|                                 |       | Diluted EPS Growth (%) | 90.9         | 38.3         | 49.0         | 32.1         | 30.0         |          |
|                                 |       | ROIC (%)               | 24.8         | 24.0         | 26.7         | 24.2         | 26.0         |          |
|                                 |       | ROE (%)                | 38.3         | 36.8         | 27.0         | 21.7         | 22.9         |          |
|                                 |       | P/E (x)                | 111.9        | 80.9         | 54.3         | 41.1         | 31.6         |          |
|                                 |       | P/B (x)                | 35.9         | 25.5         | 9.9          | 8.1          | 6.6          |          |
|                                 |       | EV/EBITDA (x)          | 77.9         | 65.2         | 40.7         | 27.9         | 20.9         |          |
|                                 |       | Dividend Yield (%)     | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          |          |

Source: Company data, JM Financial. Note: Valuations as of 20/Oct/2021

| Price Performance |      |     |     |
|-------------------|------|-----|-----|
| %                 | 1M   | 6M  | 12M |
| Absolute          | 0.6  | 0.0 | 0.0 |
| Relative*         | -3.1 | 0.0 | 0.0 |

\*To the BSE Sensex

JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters, S&P Capital IQ, FactSet & Visible Alpha  
You can also access our portal: [www.jmflresearch.com](http://www.jmflresearch.com)  
Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

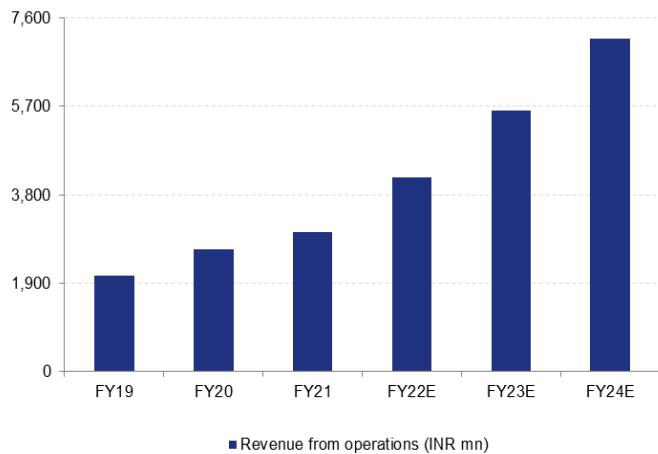
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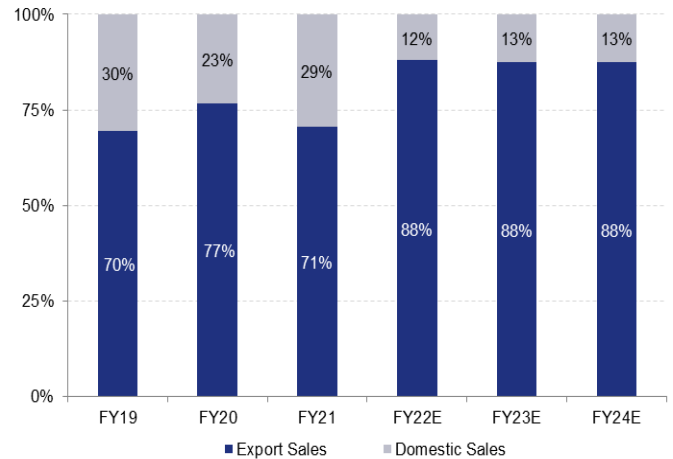
Focus charts

Exhibit 1. TCPL's revenues likely to register 34% CAGR over FY21-24E



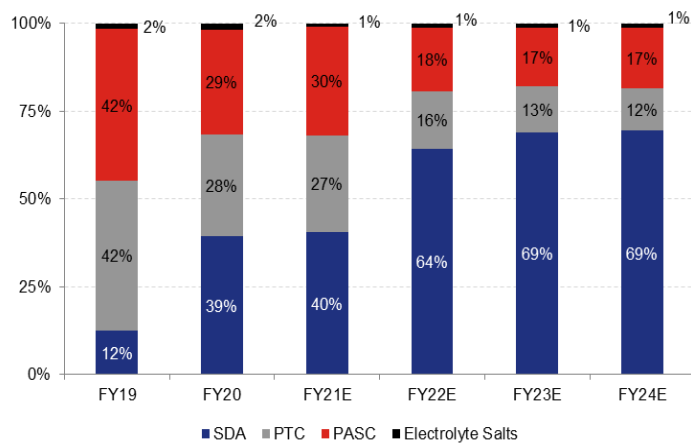
Source: Company, JM Financial

Exhibit 2. Export contribution to rise to ~88% of overall sales



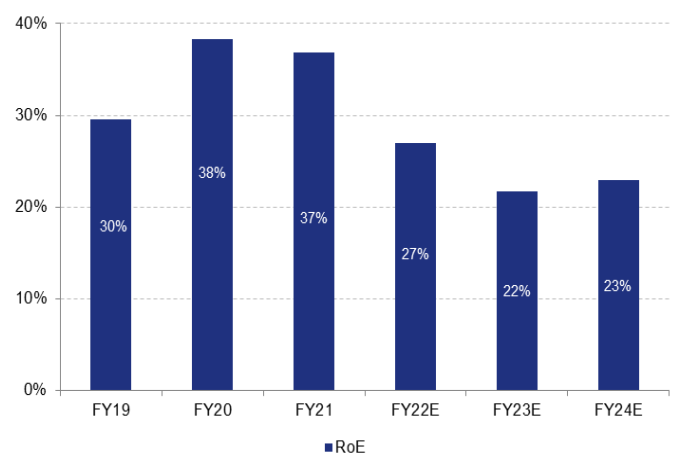
Source: Company, JM Financial

Exhibit 3. SDA contribution to jump to ~69% by FY24E



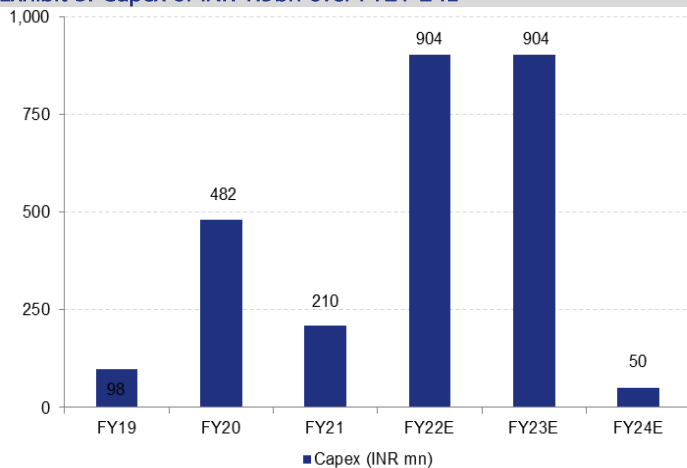
Source: Company, JM Financial

Exhibit 4. ROEs to pick up post the capacity ramp up in FY23



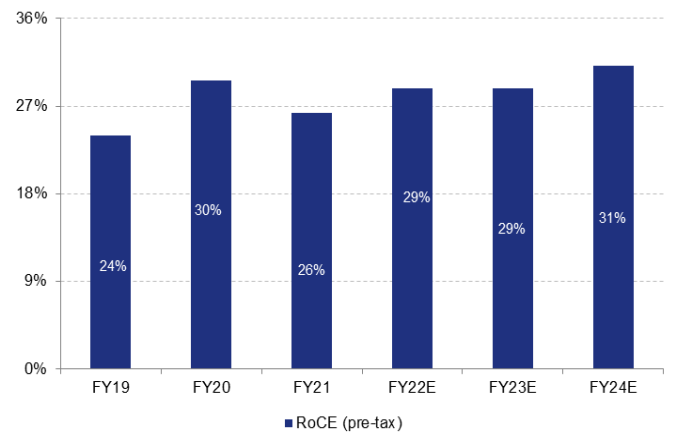
Source: Company, JM Financial

Exhibit 5. Capex of INR 1.9bn over FY21-24E



Source: Company, JM Financial

Exhibit 6. RoCE (pre-tax) to gradually improve to ~31% by FY24E



Source: Company, JM Financial

## Investment Thesis

TCPL's vigorous focus on R&D has enabled the company to make highly complex structure directing agents (SDAs). These SDAs are used to control NOx emissions and are manufactured using the electrolysis process, which generates minimal waste/by-products. Due to tightening of environmental norms and growing applications, demand for SDAs is likely to get a further boost. Being the only commercial manufacturer from India and the second largest in the world for SDAs, we believe TCPL is well-placed to benefit from this shift. We expect TCPL's Revenue/EBITDA/PAT to post a CAGR of 34%/44%/41% over FY21-24E on the back of a ramp-up in additional available capacities at its Dahej facility and jump in EBITDA margins, led by rising SDA contribution to the top line. We initiate coverage on TCPL with a BUY rating and Mar'23 TP of INR 2,650/share (based on 40X Mar'24E EPS). We believe TCPL's valuation premium (compared with other listed Indian specialty chemicals companies) is justified due to the strong entry barriers offered by SDAs.

- **Leading manufacturer of SDA and PTCs with a focus on 'green' chemistry processes:** TCPL currently operates through 2 manufacturing facilities - Ankleshwar and Dahej - in Gujarat. TCPL is the largest and only commercial manufacturer of SDAs for zeolites in India and the second largest globally. TCPL is also one of the leading global producers of an entire range of PTCs in India and one of the key producers globally. As part of the manufacturing processes, TCPL has adopted various green chemistry processes, including electrolysis. Besides the single starting raw material, electrolysis uses water and electricity to produce the final product. As a result, there is minimal generation of waste or by-products.
- **SDAs offer strong entry barriers:** TCPL's SDAs (40% of FY21 revenues) are a forward integration of PTCs and are made using the electrolysis process, which is considered to be clean and green. These SDAs are used to manufacture zeolites, which are further used as catalysts in catalytic converters (a mechanical device) to stop emission of polluting gases from automobiles, marines, refineries, industrial chimneys, etc. Given the functionally critical nature of SDAs from customers' perspective, there is a strong barrier to entry (customer approval takes ~5-7 years) and high degree of customer stickiness. TCPL started manufacturing SDA in 2011 but the major contribution started from FY20, likely on account of customer approvals. The advanced chemistries also make it extremely difficult for new players to enter the market.
- **Only commercial manufacturer of SDAs for zeolites in India:** Currently, only a handful players manufacture SDAs for zeolite across the globe. The underlying reason for that is the long approval process combined with a high degree of specificity of the product and electrolysis process. Currently, SACHEM is the world's largest player for SDAs for zeolite and TCPL is the second largest player with a ~12% volume market share (per industry estimates, global market for SDA used in zeolites was 12,000MT in FY21). Both these players manufacture SDAs using the electrolysis process. In our view, TCPL has been able to take away market share from SACHEM as it provides the catalyst manufacturers some diversity. Moreover, SACHEM's China plant is located in Jiangsu province, which currently is in the red zone (facing a power crisis). This could possibly disrupt its supplies. We believe this could further help TCPL procure additional orders.
- **Huge growth in SDA led by new customer approvals:** TCPL received two key client approvals in 2018 (Tosoh Asia) and in early 2019 (Weihai PIDC new materials); this has led to a sharp rise in SDA sales from INR 254mn in FY19 (or 12% of overall revenue) to INR 1,202mn in FY21 (or 40% of overall revenue). Sales contribution from Tosoh Asia increased from 1% in FY19 to 17% while that of Weihai PIDC increased from 2% in FY19 to 15% in FY21. Further, strong sales growth in TCPL's SDA is expected to continue (60% FY21-24 CAGR) and hence its share in total revenue is expected to rise to 65-70% in next 2-3 years. As per industry sources, current SDA demand is 12,000MT, which is likely to rise to 24,000MT over the next 3-4 years on account of Euro/BS-6 while there would be incremental demand of ~10,000MT on account of Euro/BS-7. Hence, total SDA demand is likely to reach 34,000MT by FY25E. We believe that TCPL could increase its

market share in SDA to ~19% by FY25E (vs. ~12% in FY21), by on-boarding new zeolite manufacturers and supplying additional quantities to existing customers.

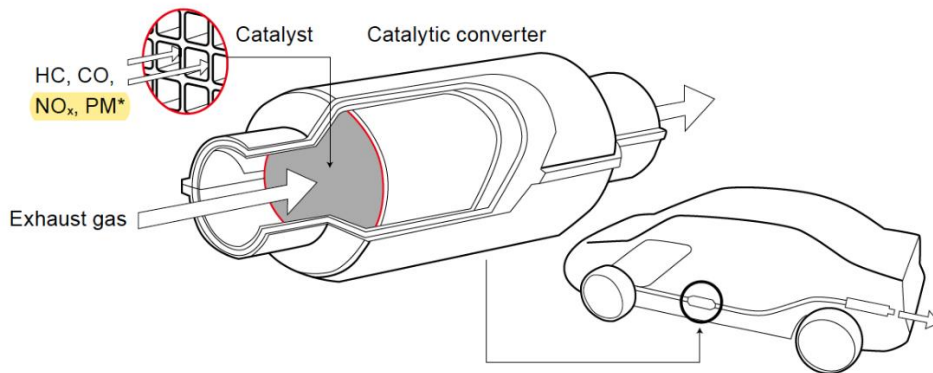
- **Offers a wide range of phase transfer catalysts (PTCs):** PTCs (27% of FY21 revenue) are used for a variety of industrial processes and facilitate the migration of a reactant from one phase into another, which is where the reaction occurs in a heterogeneous multi-phase system. Phase transfer catalysts are extensively used by the pharmaceuticals industry for synthesis, R&D, formulation and laboratory applications. For example, if a pharma company is making a tablet of a compound and wants to make a syrup of the same compound, it either will have to use heating or solvents. However, using these steps could increase one step and in turn one would have to incur additional expenses. Moreover, there lies a risk of cross-contamination. Hence, to avoid this, PTCs are used to save costs and improve yields in the pharma industry. In the agrochemicals industry, PTCs promote herbicide production in an efficient manner with improved purity. Over FY21-24E, PTC segment revenues are likely to register a modest 2% CAGR as the company wants to focus on SDAs.
- **Pharmaceutical, agrochemical intermediates and other specialty chemicals (PASC) to provide secondary growth:** TCPL received FDA approval from Gujarat State for the manufacture of cetrime and cetyl pyridinium chloride in 2004; this allowed it to expand its market in this portfolio. Under the PASC segment, in FY21, TCPL manufactured 53 products of various categories such as glymes, pyridinium salts, epoxy resins and specialty amines. The global glymes market is expected to post a 15-17% CAGR over CY20-25E. For Glymes, TCPL is the largest producer from India and one of the largest across the globe. We believe TCPL's market positioning and product offerings across different segments could act as catalysts for secondary growth and we estimate TCPL's PASC segment revenues to register a healthy 11% CAGR over FY21-24E. We believe there could be an upside risk to our growth estimate for this segment after recent disruptions in China as adoption of the China+1 strategy intensifies.



## SDA demand likely to get a further boost

- Zeolites are more efficient for use in catalytic converters:** Diesel catalytic converters are exposed to frequent temperature changes; however, they must remain stable for the entire life of the vehicle. The key benefit of using the zeolite catalyst is that it retains much more of its original structure than other diesel catalyst formulations (click [here](#) and [here](#)). Hence, demand for zeolite catalysts is likely to expand due to **a)** further tightening of automobile gas exhaust emission regulations in CY20-25 in China/India, **b)** possible usage for adsorption of volatile organic compounds and **c)** NOx emission reduction in Nitric acid plants (click [here](#)).

### Exhibit 7. Catalytic converter used in automobiles for controlling NOx emissions



Source: Tosoh, JM Financial

### Exhibit 8. Demand for zeolite catalysts likely to continue to increase further due to tightening of emission regulations



#### 6-5. Business Strategies: Advanced Materials (High-silica zeolite)

##### Assumptions

- Increased demand for catalysts due to tightening of automobile gas exhaust emission regulations in 2020-2025 (China, India, Europe)
- Expanded demand for applications such as volatile organic compound adsorption due to tightening of environmental regulations

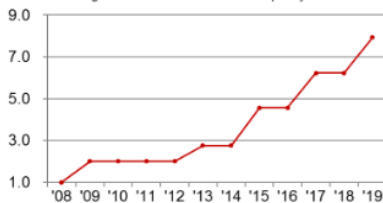
##### Objectives

Development and sales expansion of high-performance grades in automotive fields, expand business for molded products in petrochemical and environmental fields by cultivating high-end niche demand

##### Key measures

- ✓ Continue to introduce differentiated grades into market.
- ✓ Establish new brand and ensure stable production
- ✓ Expand molded grades for use (for environmental remediation use)

High-silica Zeolite Production Capacity Trends



Indexed with 2008 production capacity at "1"

##### High-silica zeolite (HSZ<sup>®</sup>)

###### Characteristics

Features high thermal and acidity resistance, used in catalytic or hydrophobic adsorbent applications

###### Applications

Automobile exhaust cleaning catalyst, petroleum refining catalyst/petrochemical catalyst, volatile organic compound adsorbent, etc.

###### Product forms

In addition to powdered form, HSZ is also offered in molded products (pellets, beads etc.)



(Powder)

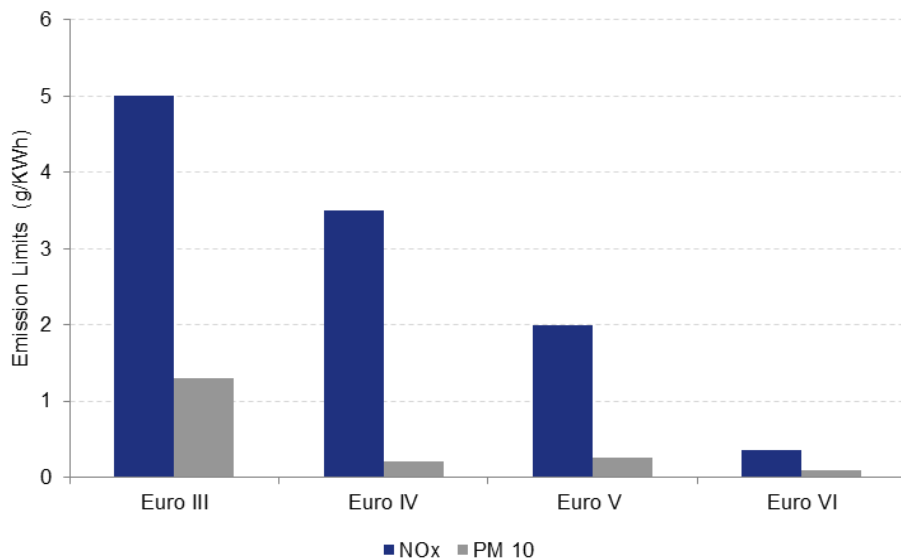
(Beads)

(Pellets)

Source: Tosoh, JM Financial


- Limited threat to SDA demand from rising adoption of Electric Vehicles:** TCPL's SDAs are used to control the polluting gases from automobiles (~75% of TCPL's SDA volume), refineries, industries, etc. Typical passenger vehicle would require ~100g of SDAs, while commercial vehicles would require ~5kg of SDAs. Hence, major usage of TCPL's SDAs would be towards the heavy vehicles, marines, etc. Moreover, adoption of electrical commercial vehicles is still a distant possibility. Further, as seen in **Exhibit 9**, permissible NOx emission limits have continuously declined and is likely to decline even further in the remaining internal combustion engine fleet. Hence, SDA demand could probably be boosted further on account of stringent norms requiring even lower emissions, resulting in higher per vehicle usage of SDAs.

Exhibit 9. Permissible NOx emissions limit have continuously declined



Source: International Council of Clean Transportation, JM Financial


Exhibit 10. Heavy duty diesel vehicles permissible emission limits



| Norm            | HDD (g/kwh) |                    |                    |                    |                    |
|-----------------|-------------|--------------------|--------------------|--------------------|--------------------|
|                 | NS V        | NS VIa             | NS VIb             | BS VI              | EU VI              |
| CO              | 4.0         | 4.0                | 4.0                | 4.0                | 4.0                |
| HC              | 0.55        | 0.16               | 0.16               | 0.16               | 0.16               |
| NO <sub>x</sub> | 2           | 0.46               | 0.46               | 0.46               | 0.46               |
| NH <sub>3</sub> | 25ppm       | 10ppm              | 10ppm              | 10ppm              | 10ppm              |
| PM              | 0.03        | 0.01               | 0.01               | 0.01               | 0.01               |
| PN              | –           | 6x10 <sup>11</sup> | 6x10 <sup>11</sup> | 6x10 <sup>11</sup> | 6x10 <sup>11</sup> |
| Cycle           | ETC         | WHTC               | WHTC               | WHTC               | WHTC               |

Source: BASF, JM Financial

Exhibit 11. Off-road vehicles permissible emission limits



| Norm            | Off-Road (g/kwh) (56-129kw range) |         |        |       |                    |
|-----------------|-----------------------------------|---------|--------|-------|--------------------|
|                 | NS IV                             | Trem IV | US T4F | EU IV | EU V               |
| CO              | 5.0                               | 5.0     | 5.0    | 5.0   | 5.0                |
| HC              | 0.19                              | 0.19    | 0.19   | 0.19  | 0.19               |
| NO <sub>x</sub> | 3.3                               | 0.4     | 0.4    | 0.4   | 0.4                |
| PM              | 0.025                             | 0.025   | 0.02   | 0.025 | 0.015              |
| PN              | 5x10 <sup>12</sup>                | –       | –      | –     | 1x10 <sup>12</sup> |
| Cycle           | NRTC                              | NRTC    | NRTC   | NRTC  | NRTC               |

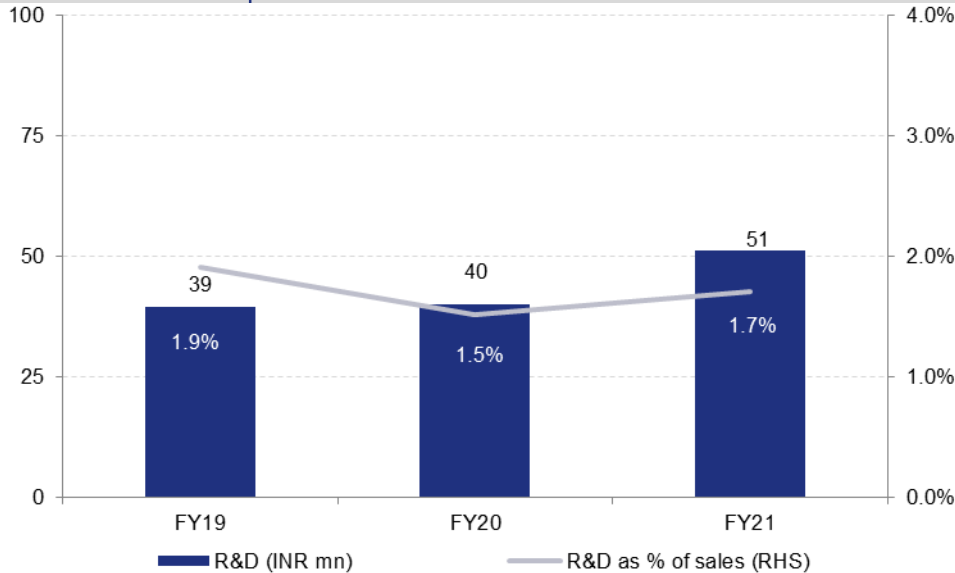
Source: BASF, JM Financial



## Technocrat promoters with a strong focus on R&D

- R&D efforts focused on development of new products:** TCPL has a high focus on R&D and its R&D spends as a % of sales has been 1.5-2.0% over FY19-21. This is comparable to listed large chemical companies in India. Its R&D capabilities have enabled it to expand its offerings from 72 products as at Mar'11 to more than 154 products as at Mar'21. TCPL's R&D team consists of 20 people, of which 7 have PhDs. This team is headed by one of the promoters, Mr. Chintan Shah.

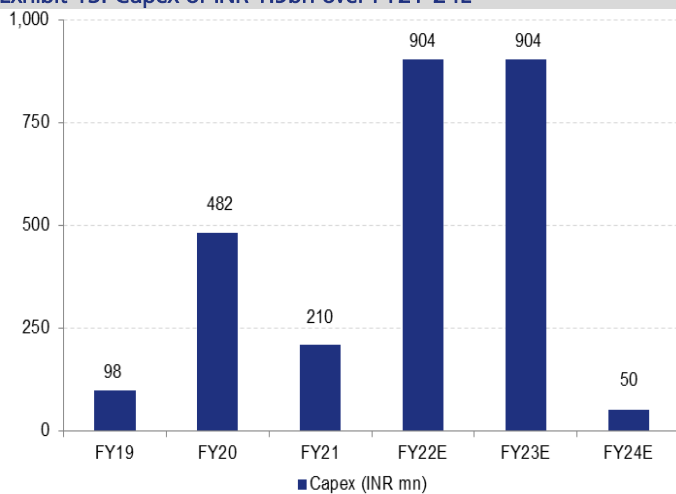
**Exhibit 12. Tatva's R&D spends as % sales has been robust ~1.5-1.9% over FY19-21**



Source: Company, JM Financial

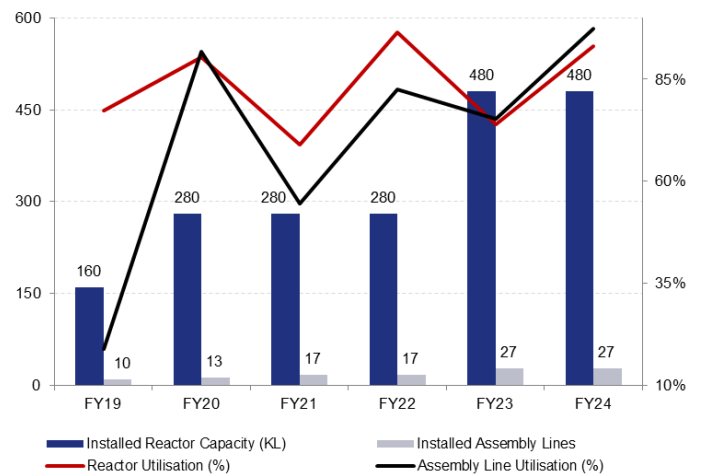
- Ongoing capacity expansions driving the growth:** Over FY19-21, TCPL phase-wise increased its reactor capacity to 280KL in FY21 (from 160KL in FY19) and assembly lines were increased to 17 in FY21 (from 10 in FY19). The company is currently in the process of further expansion at its Dahej facility. Plant testing and commissioning would start from Oct'22 while the commercial production is expected to commence in Nov'22. Hence, we expect the full ramp-up of additional capacities to start from 4QFY23.

**Exhibit 13. Capex of INR 1.9bn over FY21-24E**



Source: Company, JM Financial

**Exhibit 14. Capacity expansion in Dahej to be key driver for growth**



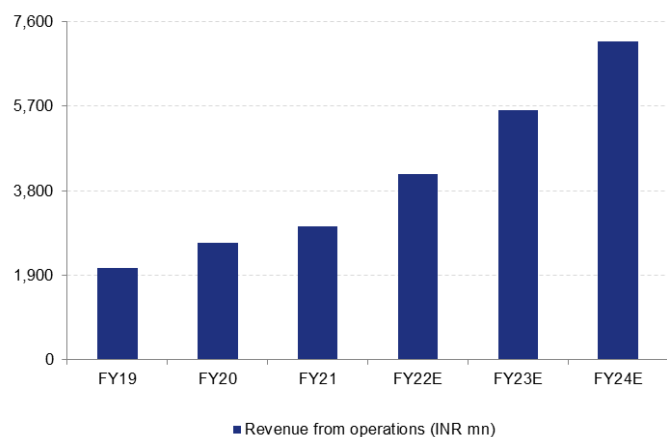
Source: Company, JM Financial

- Strong technocrat promoters:** TCPL is led by Chintan Shah (B.Engg, computer science, MS university, Baroda), Shekhar Somani (B.Pharm, MS university, Baroda), and Ajay Patel (B.Engg, chemical, MS university, Baroda), who have over 24-26 years of experience in the chemicals industry.

## Financials

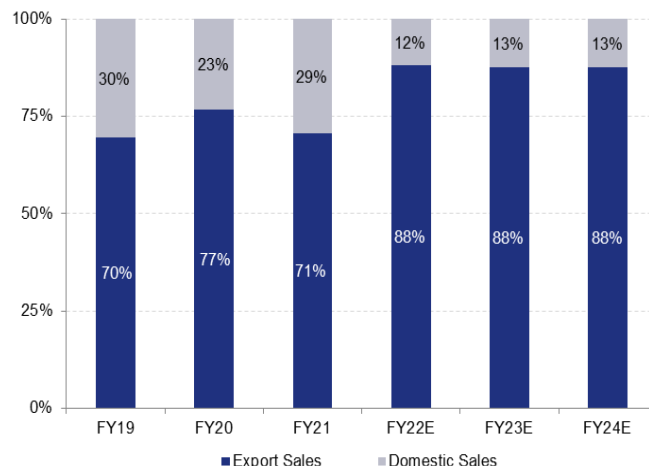
- Expect Revenue/EBITDA/PAT CAGR of 34%/44%/41% over FY21-24E:** We expect TCPL’s revenues to register a 34% CAGR over FY21-24E and reach INR 7.1bn by FY24E on the back of ramp-up of additional available capacities from **i)** expansions taken at Dahej in FY20 and **ii)** further expansion in FY22. The additional capacities should largely cater to the increasing demand of SDAs as SDA contribution would rise from INR 1.2bn in FY21 (40% of overall revenue) to INR 5.0bn in FY23E (69% of overall revenue). Due to a jump in SDA contribution and positive operating leverage, EBITDA margins are slated to rise from 21.9% in FY21 to 27% in FY24E. As a result, its EBITDA is likely to reach INR 2.0bn (a 44% CAGR over FY21-24E) and PAT is likely to reach INR 1.5bn (a 41% CAGR over FY21-24E).
- Exports contribution to inch up to ~88% of overall sales:** TCPL’s customers include Merck, Bayer, Asian Paints, Laurus Labs, Tosoh Asia, SRF, Navin Fluorine, among others. In FY19, FY20, and FY21, revenue generated from its top 10 customers represented 47%, 58.4%, and 60% of revenue from operations, respectively. TCPL exports its products to over 25 countries. In FY21, exports to Germany, US, and China accounted for 1.4%, 14.8%, and 17.9%, respectively. Since TCPL’s SDAs are primarily exported, its exports are likely to inch up to ~88% of overall sales in FY22-24E.
- ROCE (pre-tax) to show continuous improvement and reach ~31% by FY24E:** Due to the shift towards high margin SDAs, TCPL’s EBITDA margins are likely to jump to 26-27% in FY23-24E (vs. 21-22% in FY20-21). Further, its gross fixed asset turns are likely to reach the normalised 2.1x by FY24E post ramp-up of additional capacities. As a result, TCPL’s ROCE (pre-tax) is likely to show continuous improvement and reach ~31% by FY24E.

**Exhibit 15. TCPL’s revenues likely to register 34% CAGR over FY21-24E**



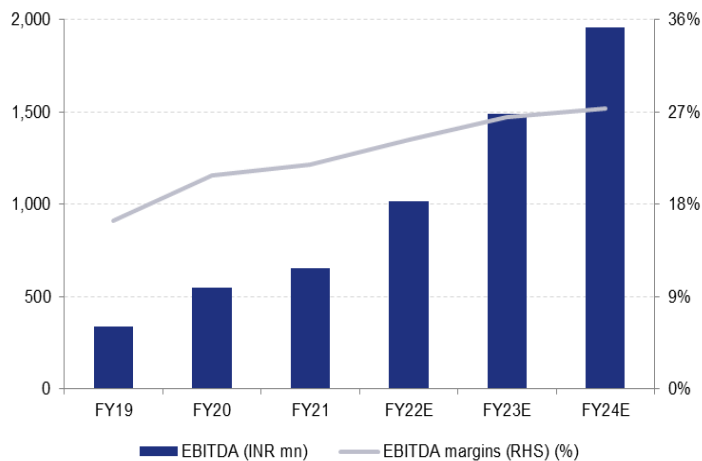
Source: Company, JM Financial

**Exhibit 16. Export contribution likely to rise to ~88% of overall sales**



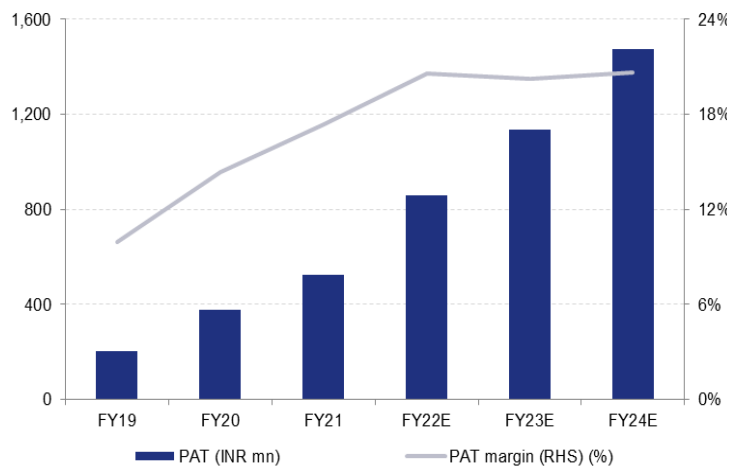
Source: Company, JM Financial

**Exhibit 17. TCPL's EBITDA is likely to post a 44% CAGR over FY21-24E**



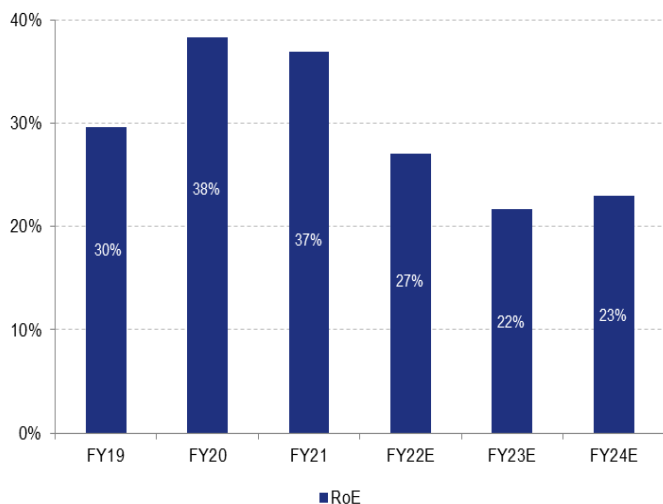
Source: Company, JM Financial

**Exhibit 18. TCPL's PAT is likely to register a 41% CAGR over FY21-24E**



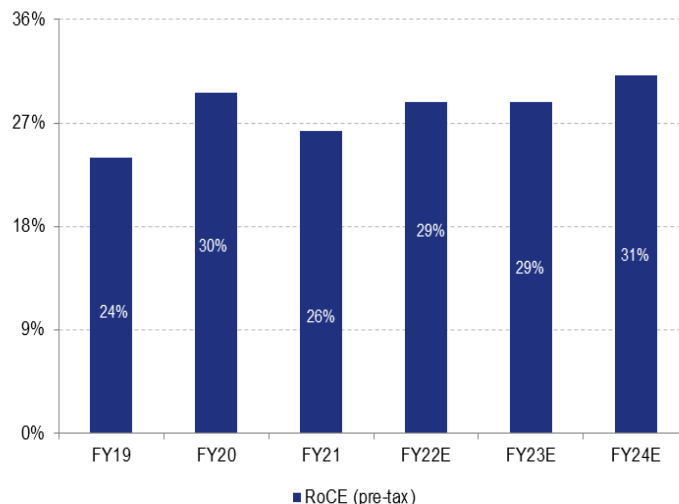
Source: Company, JM Financial

**Exhibit 19. ROEs to pick up post the capacity ramp up in FY23E**



Source: Company, JM Financial

**Exhibit 20. RoCE (pre-tax) to gradually improve to ~31% by FY24E**



Source: Company, JM Financial

## Company Background

TCPL is a specialty chemicals manufacturing company which was incorporated in 1996, and currently operates through two manufacturing facilities situated at Ankleshwar and Dahej in Gujarat. TCPL is engaged in the manufacture of a diverse portfolio of structure directing agents (“SDAs”), phase transfer catalysts (“PTCs”), electrolyte salts for super capacitor batteries and pharmaceutical & agrochemical intermediates and other specialty chemicals. TCPL is the largest and only commercial manufacturer of SDAs for zeolites in India. It also holds the second largest position globally.

In addition, TCPL is one of the leading global producers of an entire range of PTCs in India, and one of the key producers across the globe. As a manufacturer of specialty chemicals, the company focuses on application of its products, which form a key ingredient to its customers’ manufacturing and industrial processes.

TCPL’s customers include Merck, Bayer AG, Asian Paints, Ipox Chemicals, Laurus Labs, Tosoh Asia, SRF Limited, Navin Fluorine, Oriental Aromatics, Atul Limited, Otsuka Chemical, Meghmani Organics Limited, Divi’s Laboratories Limited, Hawks Chemical Company Limited, Firmenich Aromatics, Jiangsu Guotai Super Power, New Materials, and Jade Chem. Apart from its customers in India, the company also exports its products to over 25 countries, including the USA, China, Germany, Japan, South Africa, and the UK. Its exports accounted for 64.9%, 69.6%, 76.7% and 70.6%, of its revenue from operations, during FY18, FY19, FY20 and FY21, respectively.

### Exhibit 21. Key events in the history of TCPL

| Calendar year | Particulars  |
|---------------|--|
| 1996          | Incorporation of the Company   |
| 2004          | Received licence to manufacture for sale (or for distribution) of certain drugs from the Food and Drugs Control Administration, Gujarat at its Ankleshwar Manufacturing Facility   |
| 2007          | Expansion of manufacturing capacity at its Ankleshwar Manufacturing Facility   |
| 2011          | Commenced commercial manufacturing of SDAs   |
| 2013          | Attained turnover of INR 500.00mn  |
| 2015          | Attained turnover of INR 1bn<br>Incorporation of Tatva Chintan USA Inc., a wholly owned Subsidiary of the Company<br>Set up warehousing facility in Netherlands  |
| 2017          | Set up its Dahej Manufacturing Facility  |
| 2018          | Set up R&D facility in Vadodara  |
| 2019          | Incorporation of Tatva Chintan Europe BV, a wholly owned Subsidiary of the Company   |
| 2020          | Completion of ‘Together for Sustainability’ audit<br>Conversion of its Ankleshwar Manufacturing Facility to a ‘zero liquid effluent discharge facility’<br>Attained total revenue of INR 2bn<br>Increase in manufacturing capacity at its Dahej Manufacturing Facility resulting in an increase in the aggregate manufacturing capacity of the Company from 160 KL and 10 Assembly Lines to 280 KL and 17 Assembly Lines |

Source: Company

Considering the wide application of its products, the company serves customers across various industries, including the automotive, petroleum, pharmaceutical, agro chemicals, paints & coatings, dyes and pigments, personal care and flavour & fragrances industries. As of 31Mar’21, the company manufactured over 154 products, which can be divided into the following four broad categories:

#### 1) Phase Transfer Catalysts (PTCs):

TCPL manufactures phase transfer catalysts (PTCs), which are used for a variety of industrial processes and facilitate the migration of a reactant from one phase into another phase where the reaction occurs, in a heterogeneous multi-phase system. TCPL is the largest producer of PTCs in India and one of the leaders across the globe. It is also among the top 2 manufacturers producing an entire range of PTCs. The company has set up its wholly-owned subsidiaries in North America and Europe as their marketing & distribution arms which would allow it to cater to the demand of the domestic as well as international market. As of 31Mar’21, the company offered 48 products under its PTC product portfolio. PTCs accounted for 47.1%, 41.9%, 28.5% and 27.2% of its revenue from operations, during FY18, FY19, FY20 and FY21, respectively.

TCPL’s key products will enable it to gain a larger market share. TCPL’s key products, like methyl tributyl ammonium chloride and methyl triocyl ammonium chloride, are expected to post a +3% CAGR globally. Benzyl triethyl ammonium chloride is a lipophilic phase-transfer

catalyst that can be used to catalyse poly condensation reactions and is expected to post a +4% CAGR. Tetra butyl ammonium bromide (TBAB) is used in the pharmaceutical industry. The implementation of rigorous government regulations to reduce the use of hazardous chemicals is also supporting recycling in the global TBAB market, which is expected to post a +5% CAGR.

## 2) Structure Directing Agents (SDAs):

With extremely few players in the Indian and global market, the company is the largest and only commercial manufacturer of SDA for Zeolites in India. It also enjoys the second largest position globally. The advanced chemistries also make it extremely difficult for new players to enter the market chemistry. With the recent developments in emission control and refining catalyst applications, TCPL's deep knowledge about the SDA for Zeolites market helps it to gain market position.

TCPL's key chemistries and products are gaining importance in the global market. The global production of Tetramethyl Ammonium Hydroxide was valued at around USD 1.2bn in CY19. Having multiple applications, to inhibit nanoparticle aggregation, the Tetramethyl Ammonium Hydroxide market is expected to register a 7% CAGR through CY20-25E with Korea and China dominating the market, however, with just 2-3 players in the domestic market, TCPL stands an opportunity to expand and explore the global market.

Tetra propyl ammonium bromide and Tetra ethyl Ammonium Hydroxide, TCPL's key products are used as reagents in the synthesis of zeolite. TCPL's products are critical in the manufacturing of zeolites as the charge distribution and the size and geometric shape of a template are the causes of including structure-directing agents. This growth in the demand for zeolites as a catalyst is in turn driving the growth of these products. TCPL is the only company, which manages the entire value chain across the globe.

TCPL's SDAs are quaternary salts, which help in the formation of particular channels and pores during the synthesis of zeolites. Zeolites have varied applications including as catalysts and adsorbents. In particular, zeolites - promoted with transition metals such as copper and iron - have been proven to be active for the selective catalytic reduction, which is currently considered as one of the preferred technologies for emission control in automotive applications. New and innovative applications are driving the growth of the zeolite market, in turn driving the quaternary ammonium compounds (QAC) market. As of 31Mar'21, the company offered 47 products under its SDA product portfolio. SDAs accounted for 14.6%, 12.3%, 38.6% and 40.0% of its revenue from operations, during FY18, FY19, FY20 and FY21, respectively.

## 3) Pharmaceutical and agrochemical intermediates, and other specialty chemicals (PASC):

TCPL is among the key players in the specialty chemicals segment, with its range of products finding applications among the high growth segments mentioned above. Engaged in the manufacture of a variety of Disinfectants, Catalysts, Agro and Pharmaceuticals intermediates and other specialty intermediates, TCPL has a good product mix across sectors of Agrochemicals, Pharmaceuticals, Personal care, etc.

Glyme is used in various applications of drug research, battery research, biological research and others. Currently, very few players in India produce this, namely, TCPL, Prasol Chemicals, Sanjay Chemicals, Tolani Chemicals. TCPL is one of the largest producers of Glymes across the globe. It is the largest producer of Glymes in India and third largest in the world. The Global glyme market is estimated to register growth at a rate of 15-17% during CY20-25E; India will contribute significantly to this growth with government initiatives and investments supporting the Pharmaceutical sector generously.

TCPL is best positioned to reap the benefits of the on-going government incentives and initiatives to revive the Agrochemicals and Pharmaceutical API industry and decrease over reliance on Chinese imports. India's continued growth in the both these markets, in particular

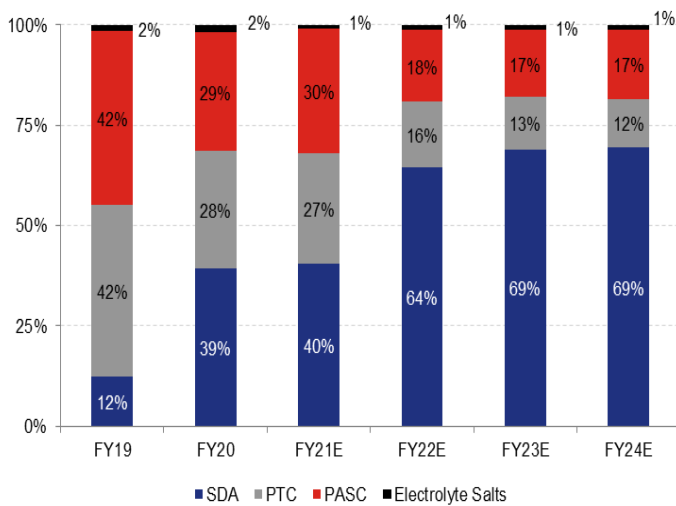
through increased exports, are set to directly benefit the country's producers of excipients and intermediates.

TCPL's items under this category are used in the manufacture of various pharmaceutical and agrochemical products as intermediates, disinfectants, catalysts and solvents. In addition, the company manufactures specialty chemicals under this category that are used in dyes & pigments, personal care ingredients, flavour and fragrance sectors. As of 31Mar'21, the company offered 53 products under its PASC product portfolio. PASC accounted for 36.0%, 42.4%, 29.1% and 30.4% respectively, of its revenue from operations, during FY18, FY19, FY20 and FY21, respectively.

**4) Electrolyte salts for super capacitor batteries:**

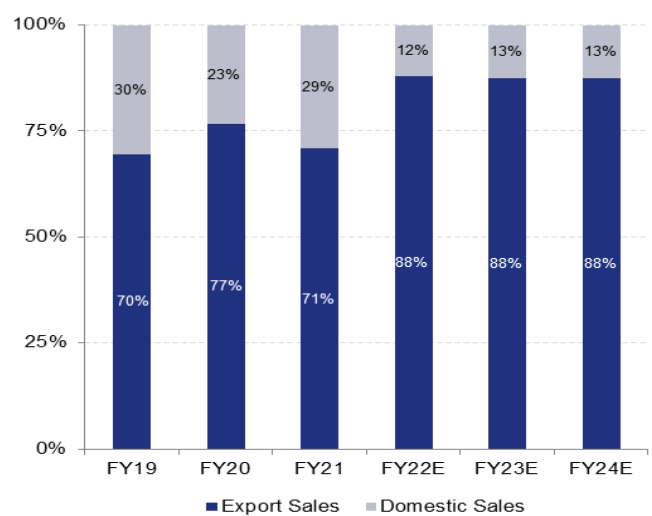
TCPL's electrolyte salts are used in the manufacture of super capacitor batteries, which are used in automobile batteries and other batteries. TCPL is the largest producer of organic battery electrolytes for super capacitors in India. As of 31Mar'21, the company offered 6 products under its Electrolyte salts product portfolio. Electrolyte salts for super capacitor batteries accounted for 0.6%, 1.6%, 1.8% and 1.0% respectively, of its revenue from operations, during FY18, FY19, FY20 and FY21, respectively.

**Exhibit 22. SDA contribution to jump to ~69% by FY24E**



Source: Company, JM Financial

**Exhibit 23. Export contribution to ~88% of overall sales**



Source: Company, JM Financial

## Industry overview

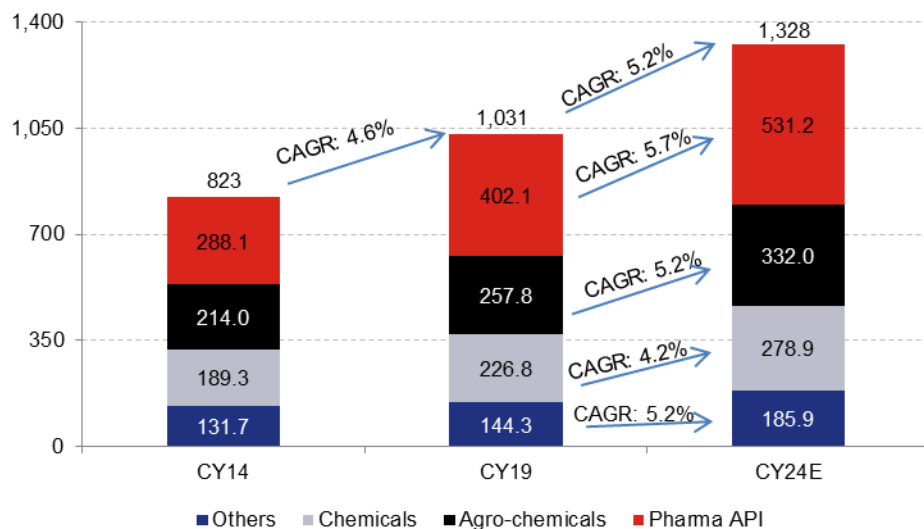
### Global phase transfer catalyst (PTC) market

Phase-Transfer Catalyst facilitates the migration of a reactant from one phase into another where the reaction occurs. The catalyst functions as a detergent for solubilising the salts into the organic phase. Phase-transfer catalyst offers faster reactions, higher conversions or yields, makes fewer by-products, eliminates the need for expensive or dangerous solvents, eliminates the need for expensive raw materials, and minimises waste problems. Phase-transfer catalysts, like ammonium salts among others have applications in pharmaceuticals and agrochemicals, which is likely to drive this market.

Global PTC market was valued at USD 1.03bn in CY19. During CY19-24E, the global PTC market is projected to expand at a 5.2% CAGR and reach USD 1.3bn by CY24E. Phase transfer catalysts are widely used in green chemistry applications. Therefore, the increasing global focus of the chemical industry on reducing residual waste and reducing the use of organic solvents is boosting the market for catalysts for phase transfer.

With several players across the globe and no substantial market share, the global PTC market is highly fragmented in nature. A few manufacturers operating in the global PTC market are: SACHEM Inc (US), Tokyo Chemical (Japan), Nippon Chemical (Japan), Tatva Chintan Pharma Chem (India), Dishman Group (India), Central Drug House (India), Pacific Organics (India), Otto Chemie (India), Volant-Chem (China), Solvay (Belgium), etc.

**Exhibit 24. Global phase transfer catalyst market (USD mn)**



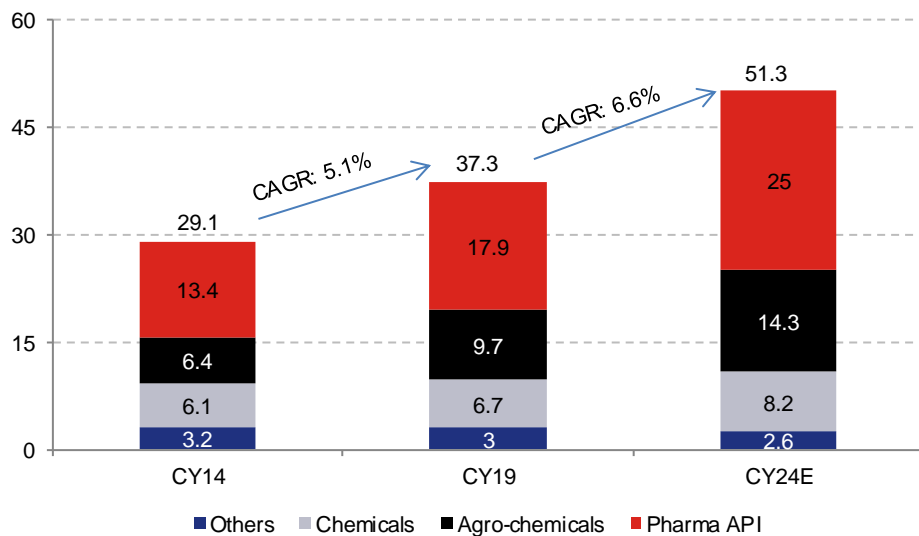
Source: Company



## India PTC market

Indian PTC market is currently valued at a little over USD 37mn (accounts for ~3.5% of the global PTC market, in 2019). With multiple initiatives from the government favourable for the growth of the Pharmaceutical and Agrochemical industries, India would see a growth in demand for PTCs, of CAGR 6.6%, and reach USD 51.3mn by CY24E, thereby increasing its market share to ~4% by 2024F. The key manufactures in the Indian market are TCPL, Dishman Group, Delta Finchem, Pacific Organics Private Limited, Otto Chemie, TCI Chemicals and a few other smaller players.

**Exhibit 25. India phase transfer catalyst market, by application (USD mn)**



Source: Company

The growth of end industries like pharmaceuticals and agrochemicals are driving the development of the PTC market in India. With a few large manufacturers in India, India is keen on exports thereby aiming to improve its market share. The demand for Phase Transfer Catalysts is expected to grow owing to their advantages in realizing faster rate of reactions, achieving better yields or conversions, form a lesser number of by-products, eliminating the requirement for unsafe solvents and minimising concerns associated with waste production. The increase in demand for the adoption of green chemistry in India would also boost the PTC market.

## Global Quaternary Ammonium Compounds (Quats) market

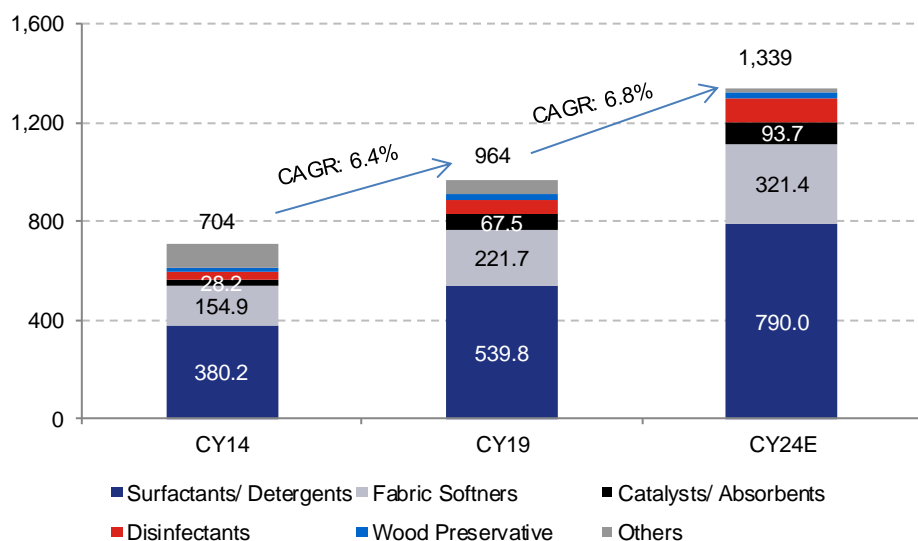
Quaternary ammonium compounds are usually used in personal care products, as conditioning agents during the production of the skin, cloth, and hair softeners and also as disinfectants in the food industry. Major applications for QACs are found in detergents due to the rising hygiene awareness among consumers. Growing demand for builders in detergents owing to its enhanced cleaning property is expected to augment market growth. Furthermore, development of the detergents industry is expected to fuel product demand over the forecast period. Due to their high cation-exchange ability as well as to the molecular sieve properties, they have been widely used as adsorbents in separation and purification processes over the last few years.

More recently, zeolites have also been introduced for catalytic emission control, e.g., reducing the emission levels of nitrogen oxides (NOx) from both stationary and mobile sources. In particular, zeolites promoted with transition metals such as copper and iron have been proven to be active for the selective catalytic reduction of NOx by ammonia, which is currently considered as one of the preferred technologies for NOx removal from lean exhaust gases in automotive applications. Areas in which zeolites show strong environmental potential are: reduction of atmospheric NOx, reduction of atmospheric VOC's (including automotive cold start), process improvements in the chemical industry.

The global market for Quaternary Ammonium Compounds (Quats) is expected to post a CAGR of 6.8% from USD 963.7mn in CY19 to USD 1.4bn in CY24E. The growth in hospital-acquired infections, an increase in the geriatric population, growth in the prevalence of chronic disease, and the rise in the number of surgical procedures are fostering the demand for the Quats market. The developing economies are expected to give market players ample growth opportunities.

Fabric softeners, disinfectants, surfactants, antistatic agents, and wood preservation, among others act as quaternary ammonium compounds. The different application of the product is expected in the coming period to increase its demand. In personal care products, quaternary ammonium compounds are typically used as conditioning agents during the manufacture of skin, fabric, and hair softeners and also as a conditioning agent during the manufacture of the skin, cloth, and hair softeners and also as disinfectants in the food industry.

**Exhibit 26. Global Quats market, by application (USD mn)**

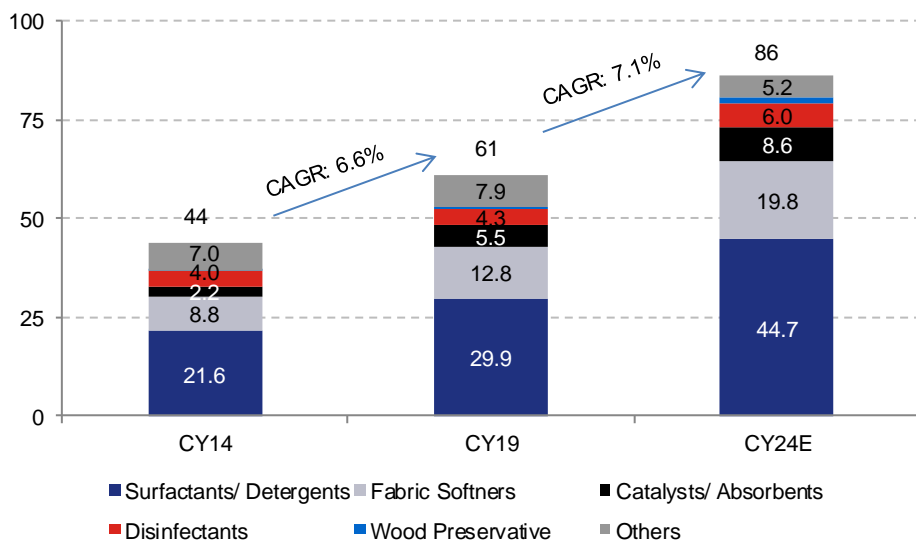


Source: Company Note: the above is inclusive of its use in manufacturing of zeolites as SDAs and further in zeolite catalysts

### India Quats market

India represents ~6% of the global Quats market standing at USD 61mn. APAC represents ~28% of the market excluding India. The demand for quaternary ammonium compounds is growing in the Asia Pacific region owing to the increasing disposable income of the people in China, and India, which is increasing the sales of personal care products. India is forecasted to post a CAGR of 7.1% during the forecast period. With a rising concern over health and hygiene in addition to the support from the government in numerous ways to focus on disinfection, the market for QACs in India will see a boom. The market in India is driven by the growing population, economic growth, increasing industrialisation, and infrastructure development.

**Exhibit 27. India Quats market, by application (USD mn)**



Source: Company Note: the above is inclusive of its use in manufacturing of zeolites as SDAs and further in zeolite catalysts

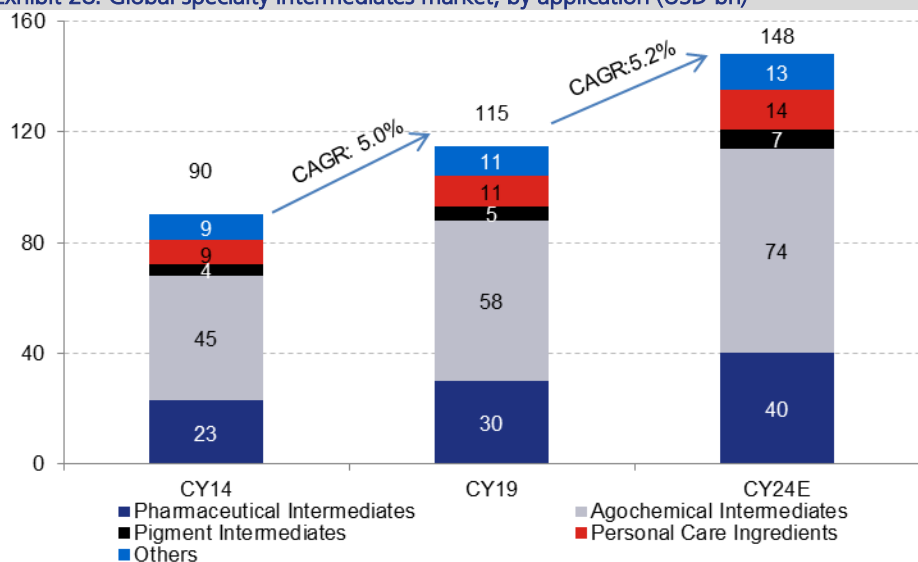
## Global Pharma & Agro Intermediates and other Specialty Intermediates Market Overview

The global specialty intermediates market stands at USD 115bn in the CY19, and is projected to post a 5.2% CAGR by CY24E and estimated to reach USD 148bn. This growth is primarily driven through the high growth end-use segments such as pharmaceuticals, agrochemicals, paints and coatings, personal care, flavour & fragrances, etc. Some countries such as China and India have been actively catering to export-led demand in the application segments of specialty intermediates, which is making these regions attractive (within Asia Pacific) in intermediates space.

Intermediates refer to the substances that are semi-finished products and used as catalysts. Chemical intermediates are generated during each and every step of the chemical reaction that is meant to change a reactant into a final product. Intermediates come in various forms such as solid, liquid as well as gas. Specialty intermediates are highly consumed in application segments like manufacturing, API, crop protection active ingredients, paints and coatings, detergents, textiles, etc.

More than half of the specialty intermediates market is concentrated in developed regions such as United States, Western European nations, etc. The presence of multinational conglomerates is prominent in these regions and some quantities of specialty intermediates are also exported to high demand centres such as Asia Pacific. Due to a shift in the manufacturing base towards east, APAC holds significant market share in the specialty intermediates market. Further, reagents/reactants, solvents, protective groups and building blocks account for around 75% of the market of specialty intermediates across the globe. The remaining 25% comprises of lubricants, catalysts and other chemistries.

**Exhibit 28. Global specialty intermediates market, by application (USD bn)**

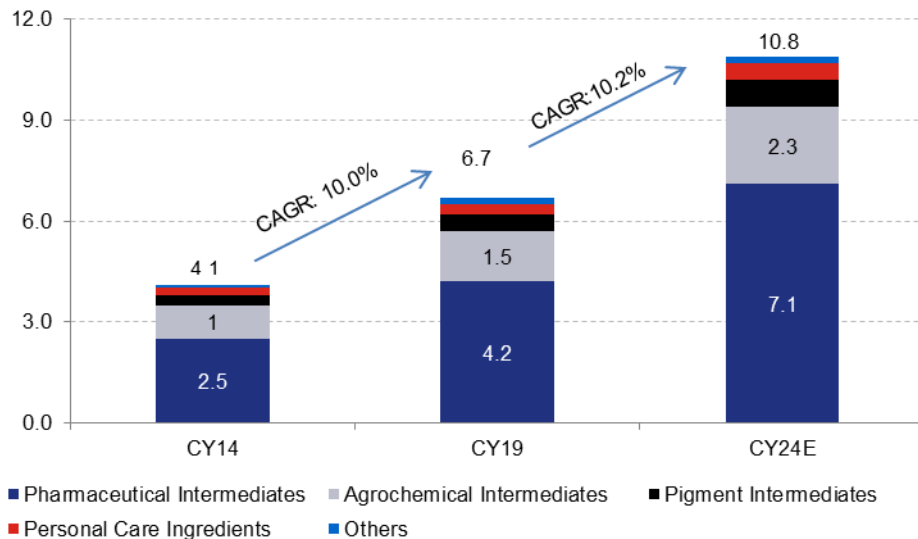


Source: Company Note: the above is inclusive of its use in manufacturing of zeolites as SDAs and further in zeolite catalysts

## India Specialty Intermediates Market

India specialty intermediates market stands at USD 6.7bn in CY19 projected to record a 10.2% CAGR over the next half decade to reach USD 10.8bn by the year CY24F. India's specialty intermediates market accounts for approximately 5-6% of the global specialty intermediates market. Pharmaceutical intermediates market comprise of more than half of the India specialty intermediates market. Some of the large volume specialty intermediates used in pharmaceutical application are amides, chlorides, organic acids, hydrochlorides, amines, hydroxides, etc. Pharmaceutical and agrochemical segments are expected to grow exponentially in India leading to a growth in the market size of these application segments as well. API and bulk drugs are the key markets for specialty intermediates in India. This market constitutes of >50% of the total India specialty intermediates market (64%).

**Exhibit 29. India specialty intermediates market, by application (USD bn)**



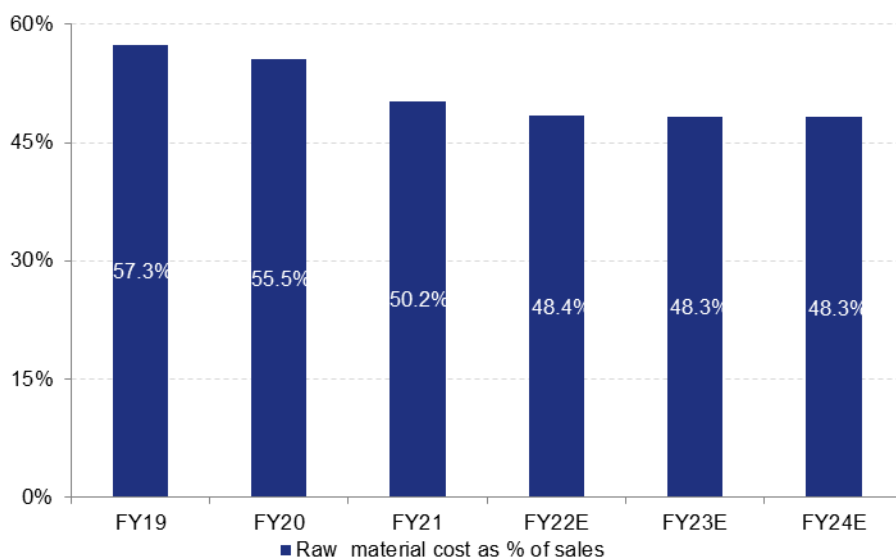
Source: Company Note: the above is inclusive of its use in manufacturing of zeolites as SDAs and further in zeolite catalysts

## Raw materials

The raw materials used by TCPL in its manufacturing process may be categorised as follows: **i)** tertiary amines; **ii)** alkyl halides; **iii)** general solvents; and **iv)** general and fine chemicals. The cost of materials consumed represented 57.3%, 55.5% and 50.2% in FY19, FY20, and FY21, of its revenue from operations, respectively.

The company's tertiary amines are sourced from both domestic as well as overseas suppliers located in USA, Germany and China. Apart from tertiary amines, the remaining raw materials are primarily sourced from the domestic suppliers in Gujarat and Maharashtra, on a purchase order basis. In FY19, FY20 and FY21, its expenditure on raw materials sourced from domestic suppliers accounted for 73.5%, 44.4% and 54.6%, respectively, of its total expenditure on its raw materials.

**Exhibit 30. Raw material cost likely to remain steady at ~48% over FY22-24E**



Source: Company, JM Financial

As part of its manufacturing operations, the company requires a steady and abundant supply of power and steam. Its power requirements of its Ankleshwar Manufacturing Facility are met through local state power grid. For its Dahej Manufacturing Facility, the company has entered a power purchase agreement with a private sector power company for the supply of electrical power. The company also maintains diesel generator sets at its manufacturing facilities, as a precaution against any disruption in power supply. The Ankleshwar Manufacturing Facility and Dahej Manufacturing Facility receive water supply from the Gujarat Industrial Development Corporation ("GIDC"). Utility charges accounted for 4.2%, 5.8% and 5.8%, of its total expenses in FY19, FY20, and FY21, respectively.

## Manufacturing Facilities

TCPL currently operates through two manufacturing facilities situated at Ankleshwar and Dahej in Gujarat, both of which are strategically located very close to the Hazira port. Over the years, the company has invested in its processes and its manufacturing infrastructure and systems.

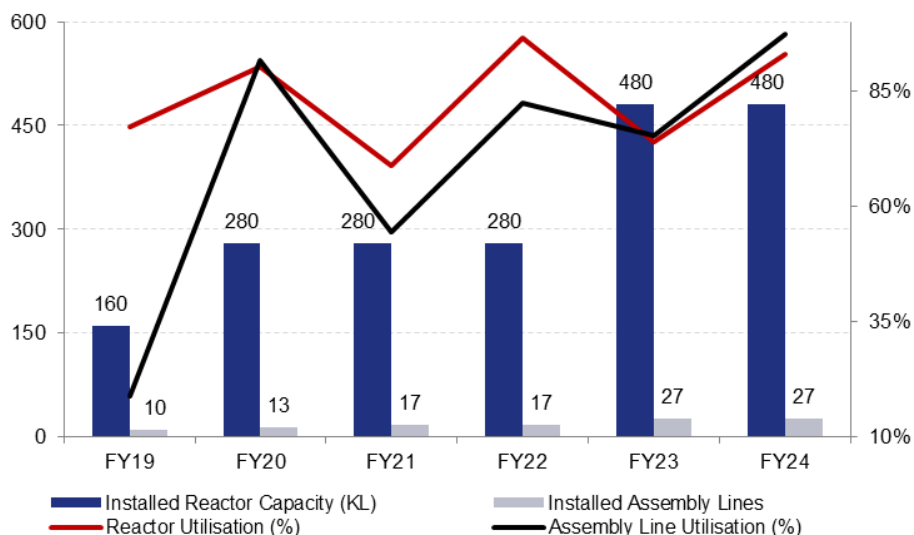
TCPL's manufacturing facilities employ various modern machinery and equipment, including reactors, assembly lines, Agitated Nutsche Filter Dryers (ANFDs), centrifuges and Rotary Conical Vacuum Dryers (RCVDs). These equipment's enable its facilities to undertake various chemistry processes, such as, quaternization, methylation, amination, phase transfer reactions, cyclization, halogenation, condensation, and electrolysis.

As part of its eco-friendly and environmentally sustainable initiatives, TCPL has adopted various 'green' chemistry processes, including electrolysis as part of its manufacturing process. Besides the single starting raw material, electrolysis only uses water and electricity to produce the target product. Considering that no additional chemicals are used, this helps ensure that the company does not generate any additional waste or by-products. TCPL has a team of 20 employees at its R&D facility at Vadodara. The team comprises of seven personnel with doctorate degrees in science. TCPL's Promoter, Chintan Shah is responsible for and heads the R&D initiatives of the company.

Further, since the commencement of its dedicated R&D department, its portfolio has grown from one product in 1996 to 154 products as of 31Mar'21. The company believes that its product and process innovations will be key factors going forward and its continued investment in R&D will better prepare it for sustainability and take advantage of any future opportunities.

Over FY19-21, TCPL phase-wise increased its reactor capacity to 280KL in FY21 (from 160KL in FY19) and assembly lines were increased to 17 in FY21 (from 10 in FY19). The company is currently in the process of further expansion at its Dahej facility. Plant testing and commissioning would start from Oct'22 while the commercial production is expected to commence in Nov'22. Hence, we expect the full ramp-up of additional capacities to start from 4QFY23.

**Exhibit 31. Capacity expansion in Dahej to be key driver for growth**



Source: Company, JM Financial



## Valuation

Due to tightening of environmental norms and further applications, demand for SDAs is likely to get a further boost. Being the only commercial manufacturer out of India and second largest in the world for SDA, we believe TCPL is well placed to benefit from this shift. We initiate coverage on TCPL with a **BUY and Mar'23 TP of INR 2,650/share** (based on 40X Mar'24E EPS). We believe TCPL's valuation premium (compared with other listed Indian specialty chemicals companies) is justified due to strong entry barriers offered by SDAs.

### Exhibit 32. TCPL's peer comparison

| Company             | M.Cap<br>(USD Bn) | EV/EBITDA |       |       | P/E (x) |       |       | P/B (x) |       |       | ROE (%) |       |       |
|---------------------|-------------------|-----------|-------|-------|---------|-------|-------|---------|-------|-------|---------|-------|-------|
|                     |                   | FY21      | FY22E | FY23E | FY21    | FY22E | FY23E | FY21    | FY22E | FY23E | FY21    | FY22E | FY23E |
| Anupam Rasayan      | 1.1               | 42.9      | 31.8  | 23.4  | 91.2    | 49.4  | 32.3  | 4.6     | 4.5   | 4.0   | 7.3     | 9.5   | 13.0  |
| Clean Science Tech* | 2.9               | 81.2      | 65.6  | 50.3  | 107.2   | 89.7  | 69.1  | 39.4    | 27.6  | 19.9  | 45.0    | 36.2  | 33.4  |
| Tatva Chintan*      | 0.6               | 40.8      | 28.0  | 21.0  | 80.9    | 54.3  | 41.1  | 25.5    | 9.9   | 8.1   | 36.8    | 27.0  | 21.7  |
| Navin Fluorine      | 2.3               | 42.1      | 45.1  | 29.3  | 53.0    | 61.7  | 41.2  | 8.3     | 9.4   | 7.9   | 16.9    | 16.0  | 20.7  |
| Galaxy Surfactants  | 1.6               | 20.4      | 23.7  | 20.5  | 29.9    | 36.0  | 30.8  | 6.9     | 7.6   | 6.4   | 25.5    | 22.7  | 22.4  |
| PI Industries       | 6.4               | 31.9      | 36.4  | 28.1  | 45.2    | 53.6  | 42.4  | 6.4     | 7.8   | 6.8   | 18.0    | 15.7  | 17.1  |
| SRF Ltd             | 8.7               | 16.1      | 25.6  | 21.8  | 26.3    | 41.9  | 35.4  | 4.7     | 8.0   | 6.7   | 20.3    | 20.7  | 20.4  |
| Aarti Industries    | 4.9               | 26.4      | 30.0  | 23.7  | 43.9    | 46.7  | 36.3  | 6.6     | 6.9   | 6.0   | 16.2    | 17.9  | 17.4  |
| Atul Ltd            | 3.8               | 21.8      | 25.4  | 22.1  | 31.8    | 37.7  | 32.5  | 5.5     | 6.5   | 5.4   | 18.9    | 18.2  | 17.6  |
| Fine Organic        | 1.4               | 34.1      | 38.5  | 29.0  | 58.2    | 58.7  | 42.9  | 9.6     | 11.8  | 9.9   | 17.8    | 22.3  | 25.0  |
| Vinati Organics     | 2.8               | 40.3      | 42.4  | 32.6  | 53.4    | 57.5  | 43.2  | 9.3     | 11.3  | 9.2   | 19.1    | 21.5  | 23.6  |
| Balaji Amines       | 1.8               | 15.5      | 28.0  | 22.4  | 23.9    | 41.5  | 32.8  | 6.4     | 12.2  | 9.6   | 30.7    | 28.9  | 27.9  |
| Alkyl Amines        | 2.6               | 26.8      | 41.0  | 35.6  | 39.4    | 62.6  | 51.6  | 14.7    | 19.4  | 15.4  | 44.4    | 34.4  | 32.7  |

Source: Bloomberg, JM Financial, Note: \*based on JMFs due to limited Bloomberg consensus estimates

## Key risks

- Failure to comply with customer's quality requirements and technical specifications:** TCPL primarily specialises in manufacture and supply of specialty chemicals. Given the nature of its products, its customers have high standards for product quality as well as delivery schedules. Adherence to quality standards is a critical factor in its manufacturing process as any defects in the products manufactured by the company or failure to comply with the technical specifications of its customers may lead to cancellation of the orders placed by its customers.
- Dependency on limited suppliers for the supply of certain raw materials:** TCPL currently relies on limited suppliers to provide certain raw materials. The company does not have long-term agreements with such suppliers, and the loss of one or more of such suppliers or a reduction in the amount of raw materials the company obtains from them could have an adverse effect on its business, results of operations, financial condition and cash flows. Its reliance on a select group of suppliers may also constrain its ability to negotiate its arrangements, which may have an impact on its profit margins and financial performance. Its suppliers could fail to meet their obligations, which may have an adverse impact on its business and results of operations. Further, there can be no assurance that strong demand, capacity limitations or other problems experienced by its suppliers will not result in occasional shortages or delays in their supply of raw materials.
- Increase in the cost of raw materials could have a material adverse effect on results of operations and financial conditions:** TCPL's primary raw materials include tertiary amines, alkyl halides, general solvents and other general and fine chemicals. Cost of materials consumed represented 54.6%, 57.3%, 55.5%, and 50.2% of revenue from operations for FY18, FY19, FY20, and FY21, respectively. The price of its product is generally fixed at the time of purchase order and therefore may not be able to pass on an increase in cost of raw material to its customers.
- Foreign operations and exchange fluctuation risk:** TCPL exports most of its products to various countries, including the USA, China, Germany, Japan, South Africa and the UK. Exports of its products accounted for 64.9%, 69.6%, 76.7% and 70.6% of its revenue from operations, during FY18, FY19, FY20, and FY21, respectively. As a result of its existing and expanding international operations, the company is subject to risks inherent to establishing and conducting operations on an international scale, including: fluctuation

in the exchange rate, ability to obtain the necessary approval from regulatory authorities, etc.

- **Customer concentration risk:** While TCPL typically has long-term relationships with its customers, the company does not have long-term agreements with them. The success of its business is accordingly significantly dependent on the company maintaining good relationships with its customers and suppliers. While the company has a number of customers, it is dependent on a limited number of customers for a significant portion of its revenue. 47%, 58.4% and 60%, of its revenue from operations were derived from its top ten customers, during FY19, FY20, and FY21, respectively.
- **High dependency on R&D and introduction of innovative products:** In order to remain competitive, TCPL needs to develop, test and manufacture new products, which must meet regulatory standards and receive requisite regulatory approvals. To accomplish this, the company commits substantial effort, funds and other resources towards its R&D activities and the company has set-up a dedicated R&D centre in Vadodara, Gujarat. For FY19, FY20, and FY21, its total expenditure for R&D activities was INR 39.39mn, INR 39.94mn, INR 51.14mn, respectively, representing 1.9%, 1.5% and 1.7% of its revenue from operations, respectively. Of which, capital expenditure towards R&D was INR 19.95mn, INR 13.62mn, INR 26.47mn, and INR 89.46mn, during FY19, FY20, and FY21, respectively. However, the company's on-going investments in R&D for new products and processes may result in higher costs without a proportionate increase in revenues. Delays in any part of the process, its inability to obtain necessary regulatory approvals for its products or failure of a product could adversely affect its business.

## Board of Directors and Key Managerial Personnel

### Board of Directors

- **Chintan Nitinkumar Shah** is the Managing Director on TCPL's Board. He holds a bachelor's degree in engineering, with a specialisation in computer science from the Maharaja Sayajirao University of Baroda. He is responsible for, among others, business development and finance and information services, in the company. He has over 24 years of experience.
- **Ajaykumar Mansukhlal Patel** is a Whole Time Director on TCPL's Board. He holds a bachelor's degree in engineering, with a specialisation in chemical engineering from the Maharaja Sayajirao University of Baroda. He is responsible for, among others, project engineering and the development and implementation of new technology, in the company. He has over 26 years of experience. He was previously associated with Sun Pharmaceutical Industries Limited as officer – chemical engineering.
- **Shekhar Rasiklal Somani** is a Whole Time Director on TCPL's Board. He holds a bachelor's degree in pharmacy from the Maharaja Sayajirao University of Baroda. He is responsible for business development, production controlling, quality, and supply chain management, in the company. He has over 24 years of experience.
- **Manher Chimanlal Desai** is an Independent Director on TCPL's Board. He holds a bachelor's degree in science, a master's degree in science (specialising in organic chemistry), and a doctorate in science from the University of Mumbai. He has previously been associated with Indian Dyestuff Industries Limited, Metrochem Industries Limited, Alaknanda Organics Limited, and Heubach Colour Private Limited.
- **Subhash Ambubhai Patel** is an Independent Director on TCPL's Board. He holds a bachelor's degree in commerce from The Maharaja Sayajirao University of Baroda. He is a fellow of the Institute of Chartered Accountants of India. He has over 33 years of experience in accountancy and audit. He is currently a partner at M/s S.A. Patel & Co., Chartered Accountants.
- **Avani Rajesh Umatt** is an Independent Director on TCPL's Board. She holds a bachelor's degree in science and a master's degree in science (specialising in applied chemistry) from The Maharaja Sayajirao University of Baroda and a doctorate in philosophy for chemistry from the Sardar Patel University. She also holds a diploma in performing arts in Kathak from The Maharaja Sayajirao University of Baroda and a bachelor's degree in music from the Gandharva Mahavidyalaya. She has over 19 years of experience in research and academia. She is currently associated with TeamLease Skills University as Associate Professor, Dean Academics HOD, Department of Health, Life and Applied Sciences. She has previously been associated with the Sardar Patel University, Indiamalt Private Limited, Bharatiya Vidya Bhavan's Sardar Patel College of Engineering, The Maharaja Sayajirao University of Baroda, Global Discovery Academy and GSFC University.

### Key Management Personnel

- **Apurva Dubey** is the Company Secretary and Compliance Officer of the company. She has been associated with the company since 25Feb'21. She is responsible for the company secretarial and compliance work in the company. She holds a bachelor's degree in management studies from the University of Mumbai and a bachelor's degree in law from The Maharaja Sayajirao University of Baroda. She is also an associate member of the ICSI. She has experience of over four years and has been previously associated with Pan Drugs Limited, BTW Atlanta Transformers India Private Limited, and Haver and Boecker India Private Limited.
- **Harish Laljibhai Patel** is the General Manager operations of the company. He has been associated with the Company since 12Oct'07. He is responsible for production planning, quality maintenance of products, and safety of employees in the company. He holds a

bachelor's degree in science from Gujarat University. He has previously been associated with Champa Purie-Chem Industries.

- **Ajay Singh Rawat** is the Head –General Manager – R&D of the company. He has been associated with the company since 5Jul'19. He is responsible for development of new molecules as per management requirement and preparation of the literature search report in the company. He holds a bachelor's degree in science and a master's degree in science (specialising in chemistry) from the Doctor Harisingh Gour Vishwavidyalaya, Sagar and he also holds a diploma in pharmaceutical production management from the Institute of Pharmaceutical Education and Research (Pune) Private Limited and a post graduate diploma in patent management from the Academy of Intellectual Property Studies. He has previously been associated with IPCA Laboratories Limited, Sterling Biotech Limited, Unichem Laboratories Limited, and Merck Development Centre Private Limited.
- **Rakesh Poonia** is the Assistant General Manager — Commercial of the company. He has been associated with the company since 17Nov'06. He is responsible for commercial, purchase, and liaisoning activities in the company. He holds a bachelor's degree in arts from the University of Rajasthan and a post graduate diploma in export — import management from the Indian Institute of Export. He has previously been associated with Shree Colorsperse Private Limited, and Heubach Colour Private Limited.
- **Niteshkumar M Prajapati** is the Assistant General Manager HR and Admin of the Company. He has been associated with the Company since 21Nov' 15. He is responsible for human resource management, administration, and industrial relations in the company. He holds a bachelor's degree in science from the South Gujarat University, a bachelor's degree in law from the Veer Narmad South Gujarat University, post-graduate diploma in industrial relations and personnel management from Bharatiya Vidya Bhavan's Rajendra Prasad Institute of Communication and Management, and the Maharashtra state certificate in information technology from the Government of Maharashtra. He has previously been associated with Kiran Gems Private Limited, Gujarat Polyfilms Private Limited, Janak Healthcare Private Limited, Larsen & Toubro Limited, and N.J. Gems.

## Promoters

The Promoters of the company are Ajaykumar Mansukhlal Patel, Chintan Nitinkumar Shah, and Shekhar Rasiklal Somani.

- **Ajaykumar Mansukhlal Patel**, aged 49 years, is one of TCPL's promoters and is also a whole time director on its board. He holds a bachelor's degree in engineering, with a specialisation in chemical engineering from the Maharaja Sayajirao University of Baroda. He is responsible for, among others, project engineering and the development and implementation of new technology, in the company.
- **Chintan Nitinkumar Shah**, aged 47 years, is one of TCPL's promoters and is also the Managing Director on its board. He holds a bachelor's degree in engineering, with a specialisation in computer science from the Maharaja Sayajirao University of Baroda. He is responsible for, among others, project engineering and the development and implementation of new technology, in the company.
- **Shekhar Rasiklal Somani**, aged 47 years, is one of TCPL's promoters and is also a whole time director on its board. He holds a bachelor's degree in pharmacy from the Maharaja Sayajirao University of Baroda. He is responsible for business development, production controlling, quality, and supply chain management, in the company.

## Financial Tables (Consolidated)

| Income Statement            |              | (INR mn)     |              |              |              |  |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--|
| Y/E March                   | FY20A        | FY21A        | FY22E        | FY23E        | FY24E        |  |
| Net Sales                   | 2,632        | 3,004        | 4,182        | 5,617        | 7,151        |  |
| Sales Growth                | 27.6%        | 14.1%        | 39.2%        | 34.3%        | 27.3%        |  |
| Other Operating Income      | 0            | 0            | 0            | 0            | 0            |  |
| <b>Total Revenue</b>        | <b>2,632</b> | <b>3,004</b> | <b>4,182</b> | <b>5,617</b> | <b>7,151</b> |  |
| Cost of Goods Sold/Op. Exp  | 1,328        | 1,494        | 2,024        | 2,713        | 3,454        |  |
| Personnel Cost              | 205          | 241          | 287          | 359          | 434          |  |
| Other Expenses              | 550          | 611          | 855          | 1,053        | 1,305        |  |
| <b>EBITDA</b>               | <b>550</b>   | <b>657</b>   | <b>1,015</b> | <b>1,492</b> | <b>1,957</b> |  |
| EBITDA Margin               | 20.9%        | 21.9%        | 24.3%        | 26.6%        | 27.4%        |  |
| EBITDA Growth               | 62.6%        | 19.6%        | 54.5%        | 46.9%        | 31.2%        |  |
| Deprn. & Amort.             | 48           | 67           | 72           | 123          | 173          |  |
| EBIT                        | 502          | 590          | 943          | 1,369        | 1,785        |  |
| Other Income                | 14           | 59           | 74           | 68           | 69           |  |
| Finance Cost                | 39           | 42           | 47           | 44           | 45           |  |
| PBT before Excep. & Forex   | 476          | 607          | 970          | 1,393        | 1,809        |  |
| Excep. & Forex Inc./Loss(-) | 0            | 0            | 0            | 0            | 0            |  |
| PBT                         | 476          | 607          | 970          | 1,393        | 1,809        |  |
| Taxes                       | 98           | 84           | 111          | 258          | 333          |  |
| Extraordinary Inc./Loss(-)  | 0            | 0            | 0            | 0            | 0            |  |
| Assoc. Profit/Min. Int.(-)  | 0            | 0            | 0            | 0            | 0            |  |
| Reported Net Profit         | 378          | 523          | 859          | 1,136        | 1,476        |  |
| <b>Adjusted Net Profit</b>  | <b>378</b>   | <b>523</b>   | <b>859</b>   | <b>1,136</b> | <b>1,476</b> |  |
| Net Margin                  | 14.4%        | 17.4%        | 20.6%        | 20.2%        | 20.6%        |  |
| Diluted Share Cap. (mn)     | 20.1         | 20.1         | 22.2         | 22.2         | 22.2         |  |
| <b>Diluted EPS (INR)</b>    | <b>18.8</b>  | <b>26.0</b>  | <b>38.8</b>  | <b>51.2</b>  | <b>66.6</b>  |  |
| Diluted EPS Growth          | 90.9%        | 38.3%        | 49.0%        | 32.1%        | 30.0%        |  |
| Total Dividend + Tax        | 0            | 2            | 2            | 2            | 2            |  |
| Dividend Per Share (INR)    | 0.0          | 0.1          | 0.1          | 0.1          | 0.1          |  |

Source: Company, JM Financial

| Cash Flow Statement          |             | (INR mn)    |              |             |              |  |
|------------------------------|-------------|-------------|--------------|-------------|--------------|--|
| Y/E March                    | FY20A       | FY21A       | FY22E        | FY23E       | FY24E        |  |
| Profit before Tax            | 476         | 607         | 970          | 1,393       | 1,809        |  |
| Deprn. & Amort.              | 48          | 67          | 72           | 123         | 173          |  |
| Net Interest Exp. / Inc. (-) | 31          | 42          | 47           | 44          | 45           |  |
| Inc (-) / Dec in WCap.       | -226        | -378        | -693         | -640        | -684         |  |
| Others                       | 6           | 3           | 0            | 0           | 0            |  |
| Taxes Paid                   | -82         | -98         | -111         | -258        | -333         |  |
| <b>Operating Cash Flow</b>   | <b>253</b>  | <b>243</b>  | <b>285</b>   | <b>662</b>  | <b>1,010</b> |  |
| Capex                        | -482        | -210        | -904         | -904        | -50          |  |
| Free Cash Flow               | -229        | 33          | -618         | -242        | 960          |  |
| Inc (-) / Dec in Investments | 74          | 2           | 0            | 0           | 0            |  |
| Others                       | 5           | -3          | 0            | 0           | 0            |  |
| <b>Investing Cash Flow</b>   | <b>-402</b> | <b>-210</b> | <b>-904</b>  | <b>-904</b> | <b>-50</b>   |  |
| Inc / Dec (-) in Capital     | 0           | 121         | 2,250        | 0           | 0            |  |
| Dividend + Tax thereon       | 0           | 0           | 0            | 0           | 0            |  |
| Inc / Dec (-) in Loans       | 135         | -4          | 470          | 170         | 520          |  |
| Others                       | -36         | -204        | -113         | -131        | -159         |  |
| <b>Financing Cash Flow</b>   | <b>100</b>  | <b>-88</b>  | <b>2,607</b> | <b>39</b>   | <b>361</b>   |  |
| <b>Inc / Dec (-) in Cash</b> | <b>-49</b>  | <b>-55</b>  | <b>1,988</b> | <b>-203</b> | <b>1,321</b> |  |
| Opening Cash Balance         | 157         | 108         | 53           | 2,042       | 1,839        |  |
| Closing Cash Balance         | 108         | 53          | 2,042        | 1,839       | 3,160        |  |

Source: Company, JM Financial

| Balance Sheet                     |              | (INR mn)     |              |              |              |  |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--|
| Y/E March                         | FY20A        | FY21A        | FY22E        | FY23E        | FY24E        |  |
| Shareholders' Fund                | 1,177        | 1,660        | 4,703        | 5,751        | 7,114        |  |
| Share Capital                     | 80           | 201          | 222          | 222          | 222          |  |
| Reserves & Surplus                | 1,097        | 1,459        | 4,481        | 5,530        | 6,892        |  |
| Preference Share Capital          | 0            | 0            | 0            | 0            | 0            |  |
| Minority Interest                 | 0            | 0            | 0            | 0            | 0            |  |
| Total Loans                       | 792          | 761          | 1,231        | 1,401        | 1,921        |  |
| Def. Tax Liab. / Assets (-)       | 45           | 21           | 21           | 21           | 21           |  |
| <b>Total - Equity &amp; Liab.</b> | <b>2,013</b> | <b>2,441</b> | <b>5,954</b> | <b>7,173</b> | <b>9,055</b> |  |
| Net Fixed Assets                  | 1,161        | 1,303        | 2,134        | 2,915        | 2,792        |  |
| Gross Fixed Assets                | 1,219        | 1,376        | 1,475        | 3,232        | 3,282        |  |
| Intangible Assets                 | 3            | 4            | 4            | 4            | 4            |  |
| Less: Deprn. & Amort.             | 111          | 176          | 248          | 370          | 543          |  |
| Capital WIP                       | 49           | 98           | 904          | 50           | 50           |  |
| Investments                       | 7            | 9            | 9            | 9            | 9            |  |
| Current Assets                    | 1,322        | 1,837        | 4,445        | 5,020        | 7,172        |  |
| Inventories                       | 636          | 720          | 1,003        | 1,347        | 1,715        |  |
| Sundry Debtors                    | 496          | 907          | 1,263        | 1,697        | 2,160        |  |
| Cash & Bank Balances              | 102          | 45           | 2,033        | 1,831        | 3,152        |  |
| Loans & Advances                  | 17           | 19           | 0            | 0            | 0            |  |
| Other Current Assets              | 72           | 145          | 145          | 145          | 145          |  |
| Current Liab. & Prov.             | 476          | 707          | 633          | 771          | 918          |  |
| Current Liabilities               | 316          | 489          | 415          | 553          | 700          |  |
| Provisions & Others               | 160          | 218          | 218          | 218          | 218          |  |
| Net Current Assets                | 846          | 1,130        | 3,812        | 4,249        | 6,254        |  |
| <b>Total - Assets</b>             | <b>2,014</b> | <b>2,441</b> | <b>5,954</b> | <b>7,173</b> | <b>9,055</b> |  |

Source: Company, JM Financial

| Dupont Analysis     |       |       |       |       |       |  |
|---------------------|-------|-------|-------|-------|-------|--|
| Y/E March           | FY20A | FY21A | FY22E | FY23E | FY24E |  |
| Net Margin          | 14.4% | 17.4% | 20.6% | 20.2% | 20.6% |  |
| Asset Turnover (x)  | 1.5   | 1.3   | 1.0   | 0.9   | 0.9   |  |
| Leverage Factor (x) | 1.8   | 1.6   | 1.3   | 1.3   | 1.3   |  |
| RoE                 | 38.3% | 36.8% | 27.0% | 21.7% | 22.9% |  |

| Key Ratios          |       |       |       |       |       |  |
|---------------------|-------|-------|-------|-------|-------|--|
| Y/E March           | FY20A | FY21A | FY22E | FY23E | FY24E |  |
| BV/Share (INR)      | 58.6  | 82.6  | 212.2 | 259.5 | 320.9 |  |
| ROIC                | 24.8% | 24.0% | 26.7% | 24.2% | 26.0% |  |
| ROE                 | 38.3% | 36.8% | 27.0% | 21.7% | 22.9% |  |
| Net Debt/Equity (x) | 0.6   | 0.4   | -0.2  | -0.1  | -0.2  |  |
| P/E (x)             | 111.9 | 80.9  | 54.3  | 41.1  | 31.6  |  |
| P/B (x)             | 35.9  | 25.5  | 9.9   | 8.1   | 6.6   |  |
| EV/EBITDA (x)       | 77.9  | 65.2  | 40.7  | 27.9  | 20.9  |  |
| EV/Sales (x)        | 16.3  | 14.3  | 9.9   | 7.4   | 5.7   |  |
| Debtor days         | 69    | 110   | 110   | 110   | 110   |  |
| Inventory days      | 88    | 88    | 88    | 88    | 88    |  |
| Creditor days       | 55    | 74    | 46    | 48    | 48    |  |

Source: Company, JM Financial

## APPENDIX I

## JM Financial Institutional Securities Limited

Corporate Identity Number: U67100MH2017PLC296081

Member of BSE Ltd., National Stock Exchange of India Ltd. and Metropolitan Stock Exchange of India Ltd.

SEBI Registration Nos.: Stock Broker - INZ000163434, Research Analyst – INH000000610

Registered Office: 7th Floor, Chenergy, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India.

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| Definition of ratings |   |
|-----------------------|---|
| Rating                | Meaning   |
| Buy                   | Total expected returns of more than 10% for large-cap stocks* and REITs and more than 15% for all other stocks, over the next twelve months. Total expected return includes dividend yields.  |
| Hold                  | Price expected to move in the range of 10% downside to 10% upside from the current market price for large-cap* stocks and REITs and in the range of 10% downside to 15% upside from the current market price for all other stocks, over the next twelve months. |
| Sell                  | Price expected to move downwards by more than 10% from the current market price over the next twelve months.  |

\* Large-cap stocks refer to securities with market capitalisation in excess of INR200bn. REIT refers to Real Estate Investment Trusts.

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