

# Alkyl Amines

Estimate changes	↔
TP change	↔
Rating change	↔

Bloomberg	AACL IN
Equity Shares (m)	51
M.Cap.(INRb)/(USDb)	133.1 / 1.6
52-Week Range (INR)	3450 / 2506
1, 6, 12 Rel. Per (%)	-2/-17/-19
12M Avg Val (INR M)	138

## Financials & Valuations (INR b)

Y/E March	FY23E	FY24E	FY25E
Sales	17.0	21.2	25.5
EBITDA	3.6	4.7	5.9
PAT	2.4	3.2	4.0
EPS (INR)	47.4	62.1	77.6
EPS Gr. (%)	7.7	31.0	25.0
BV/Sh.(INR)	229.2	275.8	334.0

## Ratios

Net D:E	0.0	(0.0)	(0.1)
RoE (%)	22.4	24.6	25.5
RoCE (%)	21.0	23.1	24.5
Payout (%)	25.0	25.0	25.0

## Valuations

P/E (x)	55.0	42.0	33.6
P/BV (x)	11.4	9.4	7.8
EV/EBITDA (x)	37.2	28.2	22.4
Div. Yield (%)	0.5	0.6	0.7
FCF Yield (%)	0.1	0.8	1.9

## Shareholding pattern (%)

As On	Dec-22	Sep-22	Dec-21
Promoter	72.0	72.0	72.0
DII	1.1	1.1	1.3
FII	2.7	2.3	2.2
Others	24.2	24.6	24.5

FII Includes depository receipts

**CMP: INR2,604**

**TP: INR2,950 (+13%)**

**Neutral**

## Performance hurt by price-led decline; volume guidance intact

- Alkyl Amines (AACL) reported marginally lower-than-estimated revenue in 3QFY23. Decline in prices of some products hit its 3Q performance. Though gross margin was steady at 49%, EBITDA came in below our estimate at INR697m with EBITDAM at 17.9% (down 190bp QoQ).
- Demand from the Pharmaceuticals sector for two of its products (Ethyl Amines and DMAPA) has been hit by inventory buildup and supply chain constraints. That being said, the long-term guidance of 10-15% volume growth remains intact as the management focuses on volume growth.
- Capacity expansion of Ethyl Amines** in Kurkumbh (100tpd capacity) is on track and it is likely to be commissioned by May/Jun'23, with mechanical completion being planned in Apr'23. Capex envisaged for the same is INR4b.
- AACL had previously **announced that it would be manufacturing four to five new products in the specialty segment**, which would be developed in its own R&D labs. The company dispatched the first tanker of one of the products in Feb'23 with the other products to be commissioned by Sep'24E.
- The stock is trading at 42x FY24E EPS and 28x FY24E EV/EBITDA. **We reiterate our Neutral rating on the stock, and value it at 40x Dec'24E EPS to arrive at our TP of INR2,950.**

## EBITDA and margin miss estimates

- AACL's revenue stood at INR3.9b (+3% YoY) in 3QFY23.
- Gross margin was at 49%** with EBITDAM at 17.9% (v/s ~19.9% in 2QFY23).
- EBITDA came in at INR697m (est. of INR826m, +5% YoY).
- PAT stood at INR457m (est. of INR549m, flat YoY) during the quarter.
- For 9MFY23**, revenue was at INR12.7b (+14% YoY), EBITDA was at INR2.7b (+5% YoY) and PAT was at INR1.8b (+1% YoY).
- EBITDAM contracted to 21.0% (v/s 22.6% in 9MFY22).

## Valuation and View

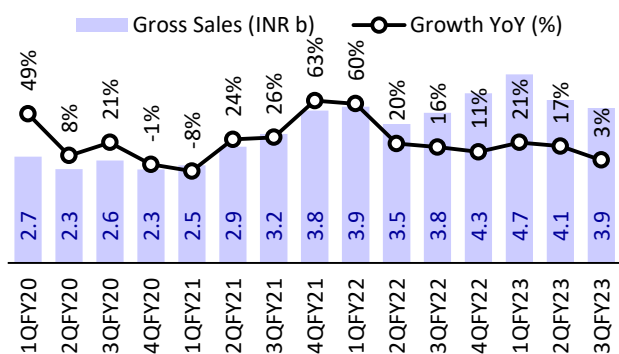
- Ongoing expansions will boost aliphatic amines capacity by ~30% (capex: INR4b, with completion expected by 1HFY24).** The current capacity stands at 90-100ktpa for aliphatic amines. Entry into new specialty products is also likely to boost margins as management sees strong demand for these products.
- We forecast an ~18% revenue CAGR over FY23-25, with an EPS CAGR of 21% over the same period.** Downside risks to our call could be increased competition, wherein the market price is determined by the competitor with little pricing power left for AACL to command.
- The stock is trading at 42x FY24E EPS and 28x EV/EBITDA. We value the company at 40x Dec'24E EPS of INR74 to arrive at our TP of INR2,950. **We maintain our Neutral rating with a potential upside of 13%.**

Standalone - Quarterly Snapshot

(INR m)

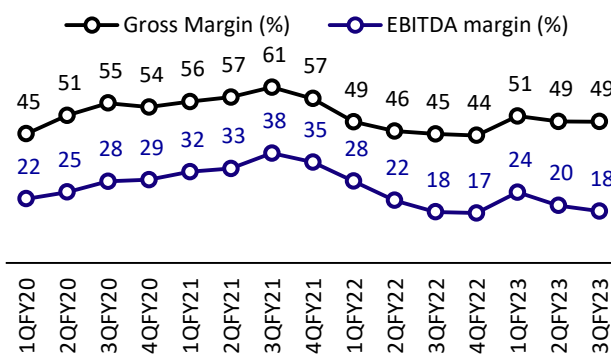
Y/E March	FY22				FY23				FY22	FY23E	FY23E	Var. (%)
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4QE				
<b>Gross Sales</b>	<b>3,918</b>	<b>3,487</b>	<b>3,767</b>	<b>4,256</b>	<b>4,735</b>	<b>4,089</b>	<b>3,885</b>	<b>4,262</b>	<b>15,428</b>	<b>16,971</b>	<b>4,125</b>	<b>-6%</b>
YoY Change (%)	59.8	19.7	16.3	11.4	20.8	17.3	3.1	0.1	24.2	10.0	9.5	
<b>Gross Margin (%)</b>	<b>48.9%</b>	<b>45.7%</b>	<b>44.7%</b>	<b>44.2%</b>	<b>50.9%</b>	<b>49.0%</b>	<b>49.0%</b>	<b>49.6%</b>	<b>45.8%</b>	<b>49.7%</b>	<b>49.5%</b>	<b>-0.5%</b>
<b>EBITDA</b>	<b>1,109</b>	<b>755</b>	<b>666</b>	<b>736</b>	<b>1,158</b>	<b>813</b>	<b>697</b>	<b>911</b>	<b>3,265</b>	<b>3,579</b>	<b>826</b>	<b>-16%</b>
Margins (%)	28.3	21.6	17.7	17.3	24.5	19.9	17.9	21.4	21.2	21.1	20.0	-2.1
Depreciation	76	77	79	116	118	112	107	113	348	449	117	
Interest	11	10	10	8	8	11	8	7	38	34	14	
Other Income	20	42	46	34	42	23	44	39	142	147	38	
<b>PBT before EO expense</b>	<b>1,043</b>	<b>709</b>	<b>623</b>	<b>646</b>	<b>1,075</b>	<b>714</b>	<b>626</b>	<b>830</b>	<b>3,021</b>	<b>3,245</b>	<b>733</b>	<b>-15%</b>
<b>PBT</b>	<b>1,043</b>	<b>709</b>	<b>623</b>	<b>646</b>	<b>1,075</b>	<b>714</b>	<b>626</b>	<b>830</b>	<b>3,021</b>	<b>3,245</b>	<b>733</b>	<b>-15%</b>
Tax	258	169	164	182	256	189	169	209	772	823	185	
Rate (%)	24.7	23.8	26.3	28.2	23.8	26.5	27.0	25.2	25.6	25.4	25.2	
<b>Reported PAT</b>	<b>785</b>	<b>541</b>	<b>459</b>	<b>464</b>	<b>819</b>	<b>524</b>	<b>457</b>	<b>621</b>	<b>2,249</b>	<b>2,421</b>	<b>549</b>	<b>-17%</b>
YoY Change (%)	48.8	-17.4	-45.7	-49.9	4.3	-3.1	-0.4	33.8	-23.8	7.6	19.6	
Margins (%)	20.0	15.5	12.2	10.9	17.3	12.8	11.8	14.6	14.6	14.3	13.3	-1.5

Exhibit 1: Sales grew 3% QoQ



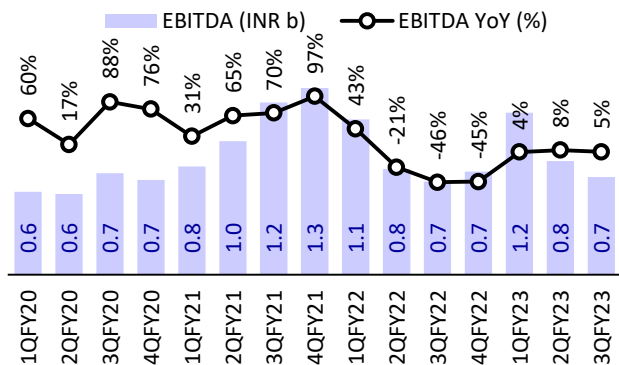
Source: Company, MOFSL

Exhibit 2: EBITDAM contracted during the quarter



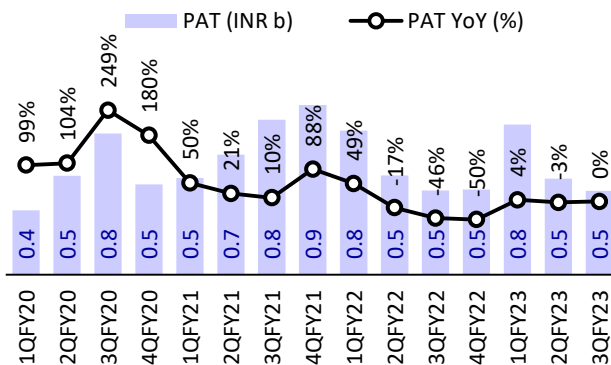
Source: Company, MOFSL

Exhibit 3: EBITDA was down 14% QoQ (margin at 17.9%)



Source: Company, MOFSL

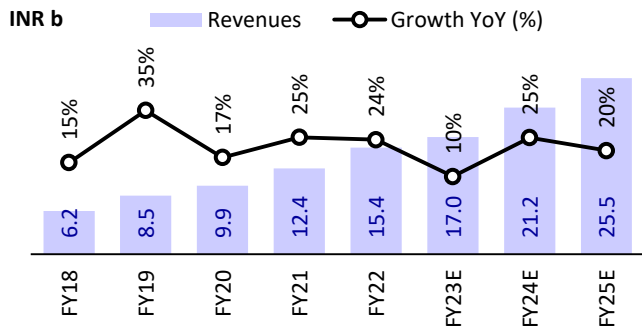
Exhibit 4: PAT declined 13% QoQ (margin at 11.8%)



Source: Company, MOFSL

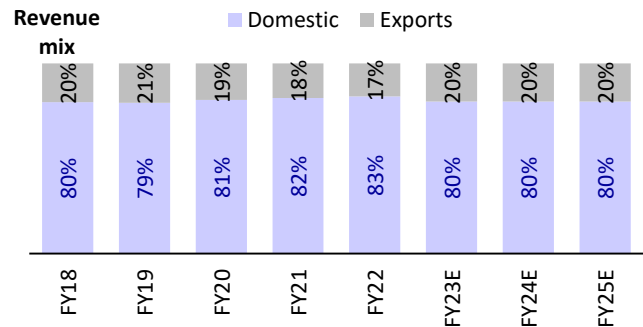
Financial story in charts

Exhibit 5: Expect ~18% revenue CAGR over FY23-25...



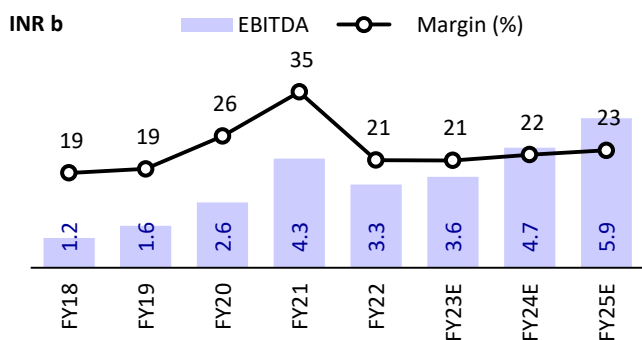
Source: Company, MOFSL

Exhibit 6: ...with export rising to 20% by FY25



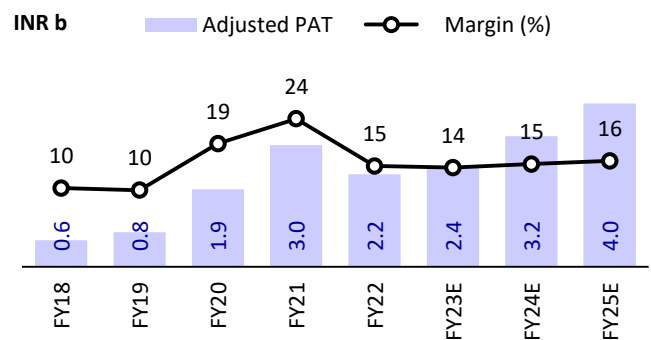
Source: Company, MOFSL

Exhibit 7: Expect EBITDA margin at ~23%...



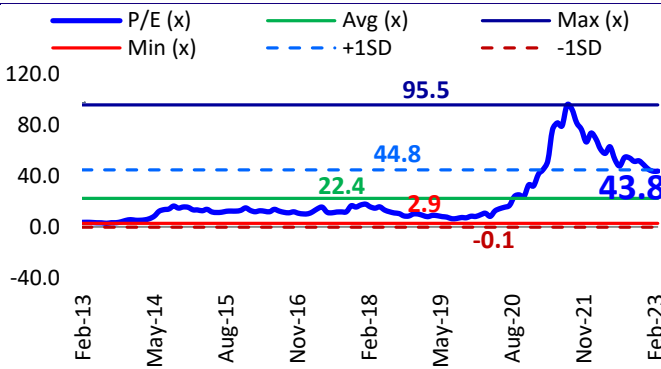
Source: Company, MOFSL

Exhibit 8: ... with PAT margin expanding by FY25E



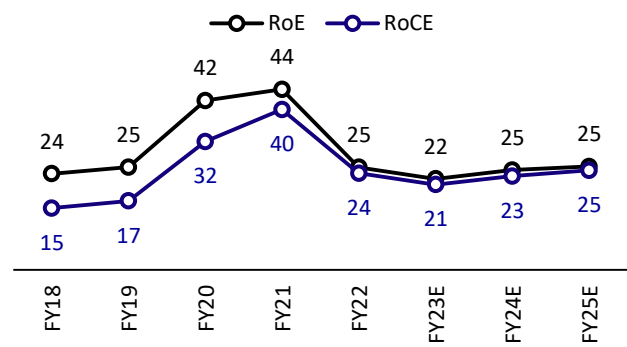
Source: Company, MOFSL

Exhibit 9: One-year forward P/E trades at 43.8x...



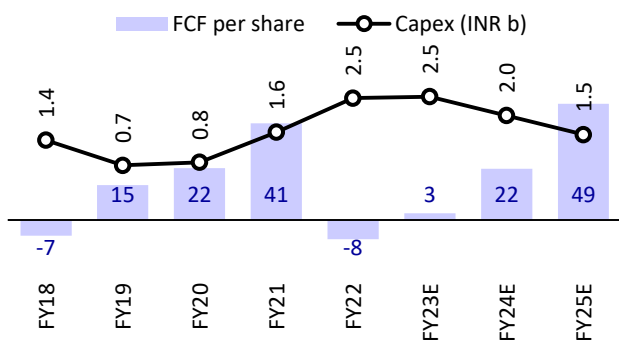
Source: Company, MOFSL

Exhibit 10: ...with return ratios stabilizing at ~23-25%



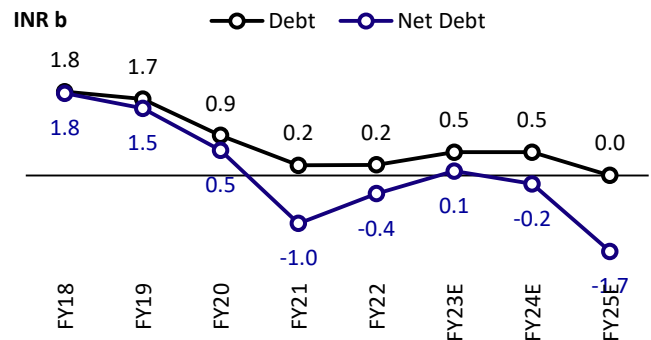
Source: Company, MOFSL

Exhibit 11: Expect strong FCF generation over FY23-25



Source: Company, MOFSL

Exhibit 12: Expect AACL to remain net cash positive



Source: Company, MOFSL

## Financials and valuations

### Standalone - Income Statement

	(INR m)							
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
<b>Total Income from Operations</b>	<b>6,248</b>	<b>8,464</b>	<b>9,929</b>	<b>12,424</b>	<b>15,428</b>	<b>16,971</b>	<b>21,213</b>	<b>25,456</b>
Change (%)	15.3	35.5	17.3	25.1	24.2	10.0	25.0	20.0
Gross Margin (%)	46.5	45.5	51.2	57.9	45.8	49.7	50.2	50.7
<b>EBITDA</b>	<b>1,164</b>	<b>1,644</b>	<b>2,570</b>	<b>4,291</b>	<b>3,265</b>	<b>3,579</b>	<b>4,717</b>	<b>5,873</b>
Margin (%)	18.6	19.4	25.9	34.5	21.2	21.1	22.2	23.1
Depreciation	157	233	269	291	348	449	596	691
<b>EBIT</b>	<b>1,008</b>	<b>1,410</b>	<b>2,301</b>	<b>4,001</b>	<b>2,918</b>	<b>3,131</b>	<b>4,121</b>	<b>5,181</b>
Int. and Finance Charges	81	148	103	63	38	34	38	41
Other Income	32	39	70	70	142	147	156	161
<b>PBT bef. EO Exp.</b>	<b>958</b>	<b>1,302</b>	<b>2,269</b>	<b>4,007</b>	<b>3,021</b>	<b>3,245</b>	<b>4,240</b>	<b>5,301</b>
EO Items	0	0	328	0	0	0	0	0
<b>PBT after EO Exp.</b>	<b>958</b>	<b>1,302</b>	<b>2,597</b>	<b>4,007</b>	<b>3,021</b>	<b>3,245</b>	<b>4,240</b>	<b>5,301</b>
Total Tax	315	464	444	1,054	772	823	1,067	1,334
Tax Rate (%)	32.9	35.7	17.1	26.3	25.6	25.4	25.2	25.2
<b>Reported PAT</b>	<b>643</b>	<b>837</b>	<b>2,153</b>	<b>2,953</b>	<b>2,249</b>	<b>2,421</b>	<b>3,173</b>	<b>3,967</b>
<b>Adjusted PAT</b>	<b>643</b>	<b>837</b>	<b>1,881</b>	<b>2,953</b>	<b>2,249</b>	<b>2,421</b>	<b>3,173</b>	<b>3,967</b>
Change (%)	27.6	30.3	124.5	57.0	-23.9	7.7	31.0	25.0
Margin (%)	10.3	9.9	18.9	23.8	14.6	14.3	15.0	15.6

### Standalone - Balance Sheet

	(INR m)							
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Equity Share Capital	102	102	102	102	102	102	102	102
Total Reserves	2,869	3,548	5,264	7,822	9,796	11,612	13,991	16,966
<b>Net Worth</b>	<b>2,972</b>	<b>3,650</b>	<b>5,366</b>	<b>7,924</b>	<b>9,898</b>	<b>11,714</b>	<b>14,093</b>	<b>17,068</b>
Total Loans	1,813	1,653	866	216	227	500	500	0
Deferred Tax Liabilities	405	507	404	414	472	472	472	472
<b>Capital Employed</b>	<b>5,189</b>	<b>5,810</b>	<b>6,636</b>	<b>8,554</b>	<b>10,598</b>	<b>12,686</b>	<b>15,066</b>	<b>17,541</b>
Gross Block	3,846	4,280	4,971	5,315	7,377	9,877	11,877	13,377
Less: Accum. Deprn.	295	515	736	1,026	1,374	1,822	2,418	3,109
<b>Net Fixed Assets</b>	<b>3,552</b>	<b>3,764</b>	<b>4,235</b>	<b>4,288</b>	<b>6,003</b>	<b>8,054</b>	<b>9,459</b>	<b>10,267</b>
Capital WIP	184	432	449	1,376	1,426	1,426	1,426	1,426
<b>Total Investments</b>	<b>14</b>	<b>14</b>	<b>0</b>	<b>302</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Curr. Assets, Loans&amp;Adv.</b>	<b>2,621</b>	<b>3,275</b>	<b>3,150</b>	<b>5,486</b>	<b>6,283</b>	<b>6,632</b>	<b>8,464</b>	<b>10,988</b>
Inventory	852	1,057	837	1,219	1,645	1,810	2,262	2,715
Account Receivables	1,238	1,526	1,642	2,280	2,767	3,044	3,805	4,566
Cash and Bank Balance	32	202	323	1,260	626	409	685	1,652
Cash	22	193	312	961	379	162	438	1,405
Bank Balance	10	8	10	299	247	247	247	247
Loans and Advances	499	490	349	727	1,245	1,369	1,712	2,054
<b>Curr. Liability &amp; Prov.</b>	<b>1,182</b>	<b>1,676</b>	<b>1,198</b>	<b>2,899</b>	<b>3,116</b>	<b>3,427</b>	<b>4,284</b>	<b>5,141</b>
Account Payables	848	1,304	748	1,790	2,285	2,513	3,141	3,770
Other Current Liabilities	250	264	354	1,002	730	803	1,004	1,205
Provisions	84	107	97	107	101	111	138	166
<b>Net Current Assets</b>	<b>1,439</b>	<b>1,599</b>	<b>1,952</b>	<b>2,587</b>	<b>3,168</b>	<b>3,205</b>	<b>4,181</b>	<b>5,847</b>
<b>Appl. of Funds</b>	<b>5,189</b>	<b>5,810</b>	<b>6,635</b>	<b>8,554</b>	<b>10,597</b>	<b>12,686</b>	<b>15,066</b>	<b>17,541</b>

## Financials and valuations

### Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
<b>Basic (INR)</b>								
EPS	12.6	16.4	36.9	57.9	44.0	47.4	62.1	77.6
EPS Growth (%)	27.6	30.3	124.5	57.0	-24.0	7.7	31.0	25.0
Cash EPS	15.7	21.0	42.1	63.6	50.8	56.2	73.7	91.2
BV/Share	58.2	71.5	105.2	155.3	193.7	229.2	275.8	334.0
DPS	2.4	3.4	8.7	16.0	10.0	11.8	15.5	19.4
Payout (%)	19.1	20.6	20.6	27.7	22.7	25.0	25.0	25.0
<b>Valuation (x)</b>								
P/E	206.9	158.8	70.7	45.0	59.2	55.0	42.0	33.6
Cash P/E	166.3	124.2	61.9	41.0	51.3	46.4	35.3	28.6
P/BV	44.8	36.4	24.8	16.8	13.5	11.4	9.4	7.8
EV/Sales	21.6	15.9	13.4	10.6	8.6	7.9	6.3	5.2
EV/EBITDA	115.7	81.8	52.0	30.7	40.7	37.2	28.2	22.4
Dividend Yield (%)	0.1	0.1	0.3	0.6	0.4	0.5	0.6	0.7
FCF per share	-6.5	14.8	21.8	40.7	-8.1	2.9	21.7	48.9
<b>Return Ratios (%)</b>								
RoE	23.7	25.3	41.7	44.4	25.2	22.4	24.6	25.5
RoCE	15.2	17.0	31.6	39.5	23.8	21.0	23.1	24.5
RoIC	15.8	17.9	34.6	51.4	30.7	24.1	25.9	28.3
<b>Working Capital Ratios</b>								
Fixed Asset Turnover (x)	2.2	2.3	2.5	2.9	3.0	2.4	2.4	2.6
Asset Turnover (x)	1.2	1.5	1.5	1.5	1.5	1.3	1.4	1.5
Inventory (Days)	50	46	31	36	39	39	39	39
Debtor (Days)	72	66	60	67	65	65	65	65
Creditor (Days)	50	56	27	53	54	54	54	54
<b>Leverage Ratio (x)</b>								
Current Ratio	2.2	2.0	2.6	1.9	2.0	1.9	2.0	2.1
Interest Cover Ratio	12.4	9.5	22.4	63.2	76.2	93.1	109.9	125.6
Net Debt/Equity	0.6	0.4	0.1	-0.1	0.0	0.0	0.0	-0.1

### Standalone - Cash Flow Statement

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
(INR m)								
OP/(Loss) before Tax	958	1,302	2,597	4,007	3,021	3,245	4,240	5,301
Depreciation	154	233	269	291	348	449	596	691
Interest Expenses	81	148	103	63	38	34	38	41
Others	-6	51	-308	1	-31	0	0	0
Direct Taxes Paid	-198	-356	-581	-1,012	-744	-823	-1,067	-1,334
(Inc)/Dec in WC	26	64	-193	290	-585	-254	-699	-699
<b>CF from Operations</b>	<b>1,016</b>	<b>1,442</b>	<b>1,886</b>	<b>3,640</b>	<b>2,047</b>	<b>2,649</b>	<b>3,107</b>	<b>4,000</b>
(Inc)/Dec in FA	-1,350	-689	-771	-1,561	-2,462	-2,500	-2,000	-1,500
<b>Free Cash Flow</b>	<b>-334</b>	<b>753</b>	<b>1,115</b>	<b>2,079</b>	<b>-415</b>	<b>149</b>	<b>1,107</b>	<b>2,500</b>
Change in Investments	16	0	343	-587	369	0	0	0
Others	-6	21	22	21	36	0	0	0
<b>CF from Investments</b>	<b>-1,340</b>	<b>-668</b>	<b>-407</b>	<b>-2,127</b>	<b>-2,057</b>	<b>-2,500</b>	<b>-2,000</b>	<b>-1,500</b>
Issue of Shares	0	0	0	4	7	0	0	0
Inc/(Dec) in Debt	547	-268	-797	-381	-228	273	0	-500
Interest Paid	-83	-150	-107	-68	-40	-34	-38	-41
Dividend Paid	-123	-172	-443	-408	-306	-605	-793	-992
Others	-16	-13	-13	-11	-6	0	0	0
<b>CF from Fin. Activity</b>	<b>325</b>	<b>-603</b>	<b>-1,360</b>	<b>-864</b>	<b>-573</b>	<b>-366</b>	<b>-831</b>	<b>-1,533</b>
<b>Inc/Dec of Cash</b>	<b>1</b>	<b>171</b>	<b>119</b>	<b>649</b>	<b>-583</b>	<b>-217</b>	<b>276</b>	<b>967</b>
Opening Balance	22	22	193	312	961	379	162	438
<b>Closing Balance</b>	<b>22</b>	<b>193</b>	<b>313</b>	<b>962</b>	<b>379</b>	<b>161</b>	<b>438</b>	<b>1,405</b>

## NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

#### Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations). Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on [www.motilaloswal.com](http://www.motilaloswal.com). MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://online.reports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at [www.nseindia.com](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com). Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

#### Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

#### For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

#### For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act") and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

#### For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co. Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

#### Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however, the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

#### **Analyst Certification**

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

#### **Terms & Conditions:**

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

#### **Disclaimer:**

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022-3980

4263; [www.motilaloswal.com](http://www.motilaloswal.com). Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: [na@motilaloswal.com](mailto:na@motilaloswal.com), Contact No.:022-71881085.

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL: IN-DP-16-2015; NSDL: IN-DP-NSDL-152-2000; Research Analyst: INH000000412. AMFI: ARN.: 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products. Customer having any query/feedback/ clarification may write to [query@motilaloswal.com](mailto:query@motilaloswal.com). In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to [grievances@motilaloswal.com](mailto:grievances@motilaloswal.com), for DP to [dpgrievances@motilaloswal.com](mailto:dpgrievances@motilaloswal.com).