



Underweight (no change)

Highlighted Companies

SRF Limited

REDUCE, TP Rs1540, Rs2368 close

The much talked about recovery is nowhere to be seen, either in refrigerants or in chemicals. In 1QFY25F, the EPS is likely to be below Rs8. Despite repeated disappointments, the stock doesn't decline at all, but this phenomenon cannot continue in perpetuity. We retain our REDUCE rating on SRF.

Gujarat Fluorochemicals REDUCE, TP Rs1946, Rs3229 close

PFAS (almost 100% of GFL's product portfolio) is facing global headwinds, thereby resulting in reduced exports and lower prices. Falling demand and prices will hit the margins in FY25F/26F. In this regard, consensus earnings estimates appear to be highly inflated.

Aarti Industries

REDUCE, TP Rs435, Rs708 close

A commodity stock trading at 65x trailing earnings at more than 5x P/BV leaves nothing on the table. MMA has already passed its peak even in volume terms. Rising nitric acid and phthalic anhydride prices, coupled with sluggish end-product demand, are further negative factors for the company. We maintain our REDUCE rating on the stock.

Summary Valuation Metrics

P/E (x)	Mar24-F	Mar25-F	Mar26-F
SRF Limited	52.55	50.9	45.26
Gujarat Fluorochemicals	81.54	66.79	50.06
Aarti Industries	58.62	48.91	40.77
P/BV (x)	Mar24-F	Mar25-F	Mar26-F
SRF Limited	6.12	5.51	4.95
Gujarat Fluorochemicals	5.97	5.48	4.94
Aarti Industries	4.88	4.5	4.11
Dividend Yield	Mar24-F	Mar25-F	Mar26-F
SRF Limited	0.17%	0.17%	0.17%
Gujarat Fluorochemicals	0%	0%	0%
Aarti Industries	0.35%	0.35%	0.35%

Research Analyst(s)



Satish KUMAR

T (91) 22 4161 1562

E satish.kumar@incredresearch.com

Abbas PUNJANI

T (91) 22 4161 1598

 $\textbf{E} \ abbas.punjani@incredresearch.com$

Pratyush KAMAL

T (91) 2241611549

E pratyush.kamal@incredresearch.com

Chemicals - Overall

1Q - Disappointment in FY25F set to begin

- Consensus earnings estimate for FY25F will get a dose of reality in 1QFY25F but don't expect downgrades as perennial 2H recovery narrative will be back.
- Notable disappointment will be from SRF, Gujarat Fluoro and Aarti Industries.
 But there is a silver lining in bulk chemicals like TAN, PH, nitric acid and IPA.
- We don't see a recovery in the so-called "specialty chemicals". These stocks have done nothing for last 3 years & recovery is unlikely in next 12-18 months.

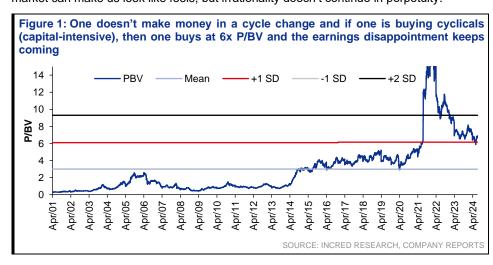
Atul, SRF, Clean, Aarti and GFL won't show material YoY EPS growth We have analyzed five companies' quarterly earnings and none of them are going to show material YoY EPS growth. SRF and Gujarat Fluorochemicals or GFL will be lucky to show double-digit EPS. Aarti Industries' MMA is well past its peak. Please see IN: Chemicals - Overall - Mono methyl aniline - peak is behind us and Atul's export growth in 1QFY25F is only driven by channel filling-led demand for 2,4 D and will fizzle out soon.

GFL has zero terminal value and Clean's HALS won't go anywhere

We have written multiple reports on how PFAs are facing global headwinds. Please see some of the recent reports on the same: 1) IN: Chemicals - Others - Are PFAS replaceable? The answer is Yes, and 2) IN: Gujarat Fluorochemicals - 30% margin in FY25F is unlikely - REDUCE (REDUCE - Maintained). Against the backdrop of regulatory headwinds, it is natural that the demand for base products will start falling and the same is happening in export markets. We always believe that it's oxymoronic to think that GFL can take away the market share of 3M, etc., who are shutting down their PFAS business because of environmental concerns. For GFL, FY23 was saved via higher HFC exports, which have now dried up. Please see IN: Gujarat Fluorochemicals Ltd - HFC falling & PFAS face regulatory risk (REDUCE - Maintained). Similarly, Clean Science's HALS is all noise. Please see IN: Clean Science and Technology - HALS - much ado about nothing (REDUCE -), IN: Clean Science and Technology - HALS - much ado about nothing-II (REDUCE - Maintained)

70x trailing EPS and 6x book value doesn't leave any cyclical upside

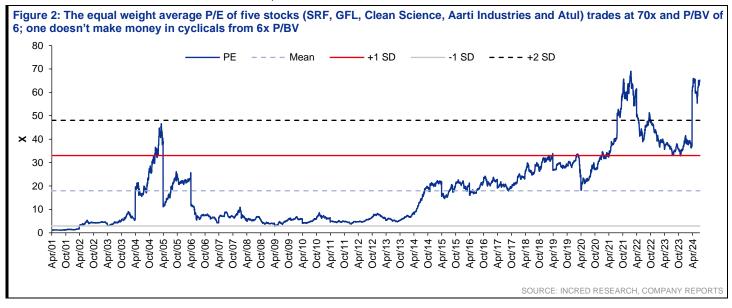
As per our interactions, most of the investors are holding these stocks, despite repeated earnings disappointment, because of the following reasons:1) Not only the belief in cycle change but also escalation of commitment. 2) Everyone is overweight and so let's go wrong with the mass. It's a good strategy though and we don't disagree with it. 3) There is always a belief that a situation like in CY21 will return when multiple product cycles were at peak. For example, in the case of SRF, HFC was doing great, and BOPET & BOPP spreads were at multi-year highs. 4) The China+1 Theory - However, it will work only in bulk chemicals and not in chemicals like MEHQ or HALS. 5) A misconceived notion, particularly in the case of GFL, is that while western companies will stop production of PFAS, somehow consumption will continue and that GFL will have a field day. At the end, the irrational market can make us look like fools, but irrationality doesn't continue in perpetuity.





1Q - Disappointment in FY25F set to begin

The deadly combo of higher valuations and earnings disappointment is present in multiple chemical stocks. In the graph below, we have plotted equally weighted average P/E for a group of stocks (SRF, GFL, Clean Science, Aarti Industries and Atul).



SRF is unlikely to post more than Rs9 EPS in 1QFY25F

The slowdown in refrigerant exports as well as continued reduced purchases by key customers like Syngenta doesn't bode well for the company.

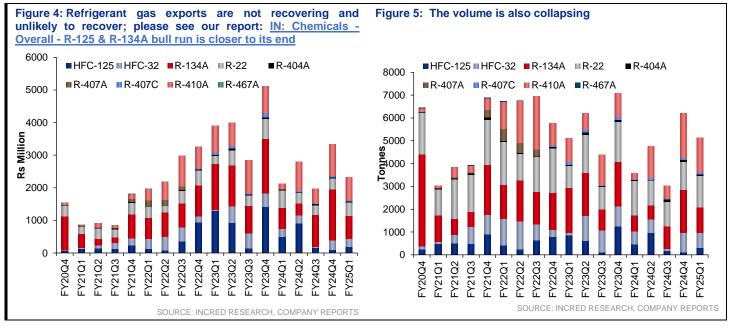
Yearly EPS run rate as per 1QFY25F earnings is barely Rs40 ➤

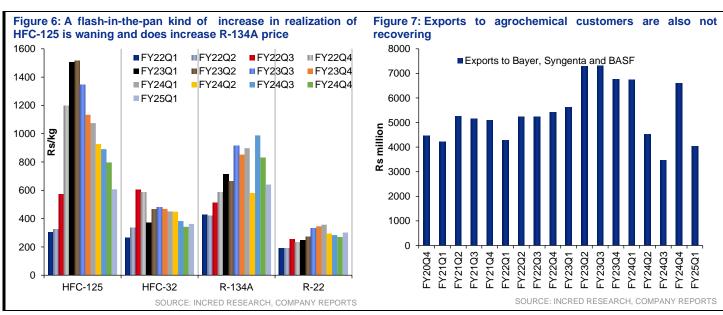
Figure 3: 1QFY25F EPS is likely to remain at ~Rs9; please note that consensus EPS estimate for FY25F is ~Rs65; the second-half recovery theory will again be back in vogue but like in the last three years, it will again be futile (Rs m) 1QFY24 **1QFY23** 2QFY23 **3QFY23** 4QFY23 2QFY24 3QFY24 4QFY24 1QFY25F **Net Revenue** 38,947 37,278 34,697 37,781 33,384 31,774 30,530 35,697 33,985 Expenses Total Cost of Goods Sold 18,578 19,529 16,944 18,884 17,005 16,201 15,547 18,335 17,672 1,942 1,953 2,102 2,438 2,466 Employee Benefit Expenses 2,142 2,180 2,266 2,466 Power & Fuel Expenses 4,103 3,737 3,443 3,440 3,528 3,438 3,194 3,288 3,288 Other Expenses 4,126 4,007 3,723 3,471 3,416 3,512 4,492 4,492 28,749 Total Expenses 29.226 26.211 28.185 26,184 25.320 24.691 28.581 27,918

EBITDA	10,198	8,052	8,486	9,596	7,200	6,453	5,839	7,116	6,067
Depreciation	1,307	1,393	1,507	1,546	1,566	1,612	1,689	1,859	1,859
EBIT	8,891	6,659	6,979	8,050	5,634	4,841	4,150	5,257	4,208
Other Income	99	327	100	223	118	291	188	234	234
Forex (Gain) /Loss	249	361	150	280	237	191	181	158	0
Interest Expense	325	445	620	659	656	793	674	900	900
Exceptional Items									
Profit Before Tax	8,416	6,181	6,309	7,334	4,858	4,148	3,483	4,433	3,542
Total Tax Expenses	2,336	1,371	1,200	1,709	1,265	1,140	949	211	892
Profit After Tax	6,080	4,810	5,109	5,625	3,593	3,008	2,534	4,222	2,649
Fully Diluted	20.5	16.2	17.2	19.0	12.1	10.2	8.6	14.3	8.9
						SOURCE	: INCRED RESE	ARCH, COMPAN	Y REPORTS



Recovery in agrochemicals still remains elusive and refrigerant gases are witnessing a decline ➤





Gujarat Fluorochemicals - zero terminal value and EPS disappointment but investors are hoping against hope

We have written multiple reports on why the terminal value of PFAS (account for a major portion of GFL's revenue) is zero. Please see some of our reports below:

- 1. <u>IN: Gujarat Fluorochemicals 30% margin in FY25F is unlikely REDUCE (REDUCE Maintained)</u>
- 2. <u>IN: Gujarat Fluorochemicals HFC falling & PFAS face regulatory risk</u> (REDUCE Maintained)
- 3. IN: Chemicals Others PFAS end of the road likely, capex is futile
- 4. IN: Chemicals Others Are PFAS replaceable? The answer is Yes

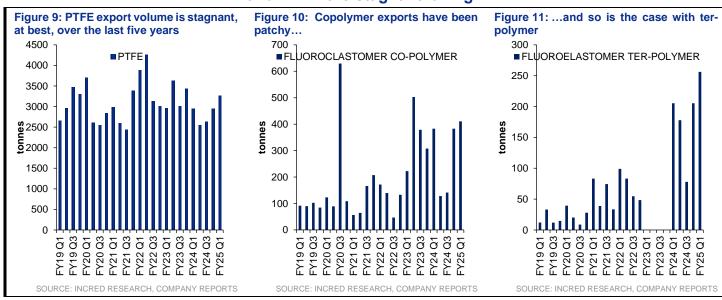
In the near term, higher earnings expectation will result in a massive disappointment.

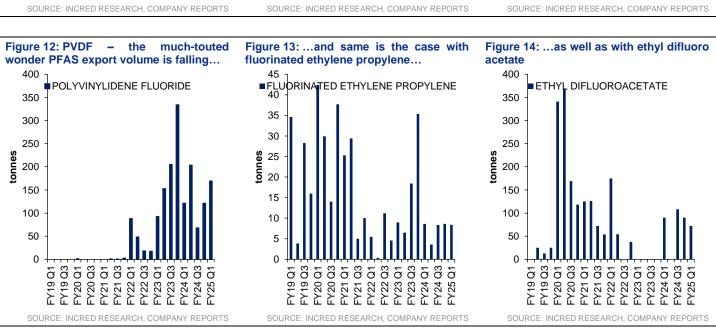


Yearly EPS run rate as per 1QFY25F earnings is ~Rs45 ➤

Figure 8: GFL will be very lucky if it is able to touch double-digit EPS in 1QFY25F; the EPS run rate indicates a yearly EPS of Rs45 (Rs m) 1QFY23 2QFY23 3QFY23 4QFY23 1QFY24 2QFY24 3QFY24 4QFY24 1QFY25F Net Revenue 13.340 14.613 12.093 9.468 9.917 11.330 14.179 14.714 11.969 Expenses Total Cost of Goods Sold 3.646 3,913 3.829 4.038 3.461 3.379 3.521 3.846 4,309 **Employee Benefit Expenses** 779 800 795 847 918 874 833 880 900 2.344 2,380 Power & Fuel 2,465 2,365 2.215 1,832 1,773 1,980 2,000 Material extraction and processing cost 70 69 71 158 39 49 82 82 Other Expenses 1.912 2 009 1.873 2 101 1 861 1.714 1.680 2 168 2.100 **Total Expenses** 8.751 9.256 8.947 9.422 8.614 7.837 7.855 8.955 9.390 **EBITDA** 4,589 5,358 5,232 5,293 3,479 2,062 2,376 2,578 1,631 Depreciation 550 572 601 638 655 676 719 812 812 1,767 4,039 4,786 4,631 4,655 2,824 955 1,343 1,564 **EBIT** 243 Other Income 262 214 186 146 135 132 183 140 Interest Expense 209 230 381 348 280 342 372 337 337 Profit Before Tax 4,092 4,799 4,464 4,493 2,690 749 1,103 1,410 1,570 Total Tax Expenses 1.058 1.226 1.173 678 396 Profit After Tax 3,034 3,572 3,305 3,319 2,012 527 801 1,010 1,174 Core EPS 27.6 32.5 30.1 30.2 18.3 7.3 9.2 10.7 4.8 SOURCE: INCRED RESEARCH, COMPANY REPORTS

Export volume as well as pricing of PFAS products like PTFE and PVDF are stagnant/falling ➤

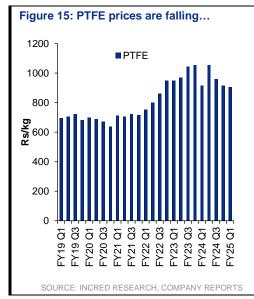


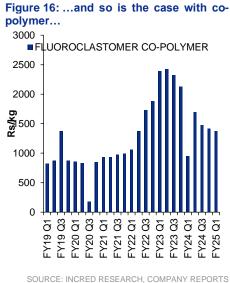


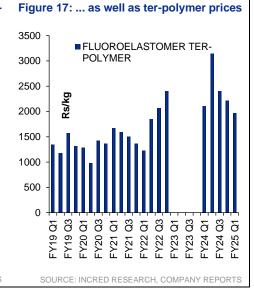


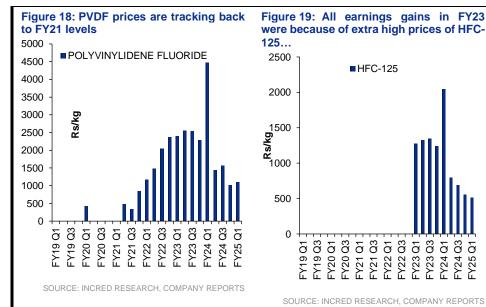
Realizations of the products are also falling >

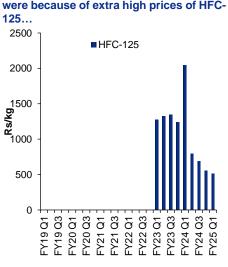
The extraordinary earnings in FY23 were not because of any of comparative advantage but simply because of extraordinary HFC-125 prices and volume.



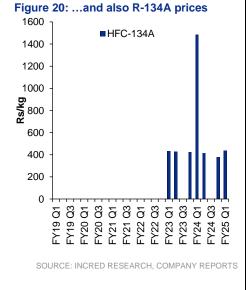






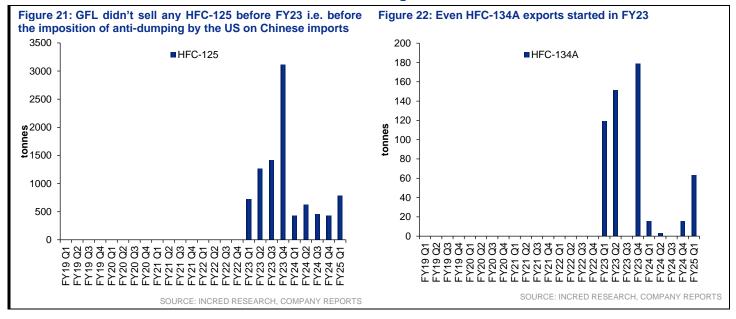


SOURCE: INCRED RESEARCH, COMPANY REPORTS





Opportunistic sales of HFC-125 drove the profits in FY23, but the same are waning now ▶



Clean Science and Technology - HALS is not a Noble Prize winning product; earnings will dissapoint

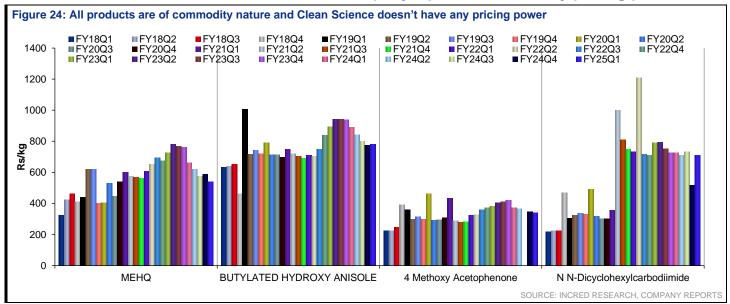
The EPS growth in 1QFY25F is likely to be single digits. HALS is projected as a wonder product by the street, but it is as good as PET chips. Tread with caution as a 75x P/E for single-digit growth is a recipe for disaster.

1QFY25F is likely to see single-digit EPS growth ➤

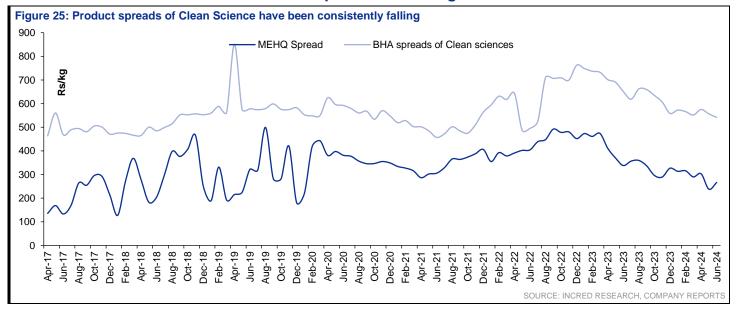
	1QFY23	2QFY23	3QFY23	4QFY23	1QFY24	2QFY24	3QFY24	4QFY24	1QFY25F
Net Revenue	2,341	2,475	2,374	2,169	1,881	1,811	1,947	2,275	2,163
Total Cost of Goods Sold	913	927	778	641	726	618	646	780	757
Employee Benefit Expenses	100	106	118	128	117	119	116	135	135
Other Expenses	414	467	396	349	277	326	319	415	415
Total Expenses	1,427	1,500	1,292	1,118	1,120	1,063	1,081	1,330	1,307
EBITDA	913	975	1,082	1,051	761	748	866	945	856
Depreciation	85	87	89	101	108	111	113	127	127
EBIT	829	888	993	950	653	637	753	818	729
Other Income	18	28	126	126	134	60	78	141	141
Interest Expense	0	0	1	1	1	3	1	6	6
Exceptional Items	0	0	0	0	0	0	0	0	0
Profit Before Tax	847	916	1,118	1,075	787	695	830	953	864
Total Tax Expenses	218	237	280	270	198	173	204	250	219
Profit After Tax	629	679	838	805	589	522	626	703	645
EPS	5.9	6.4	7.9	7.6	5.5	4.9	5.9	6.6	6.1



None of the company's products have any pricing power ▶



Product spreads are falling over the last few months >



We have written multiple reports on the futility of assuming HALS to be the saviour of Clean Science ➤

Here are the links to those reports:

- IN: Clean Science and Technology HALS much ado about nothing (REDUCE -)
- IN: Clean Science and Technology HALS much ado about nothing-II (REDUCE - Maintained)

Aarti Industries – will be lucky if it meets the lower end of its EBITDA guidance; MMA peak is well behind us

We are surprised at the bullish guidance of Rs14.5bn to Rs17bn of EBITDA guidance by Aarti Industries. We reckon that the company will be lucky to achieve even the lower end of its EBITDA guidance.

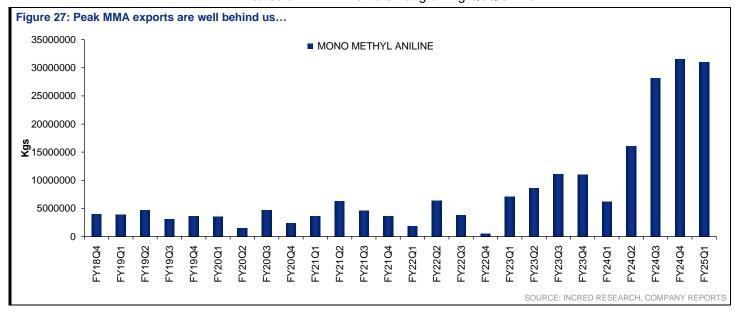


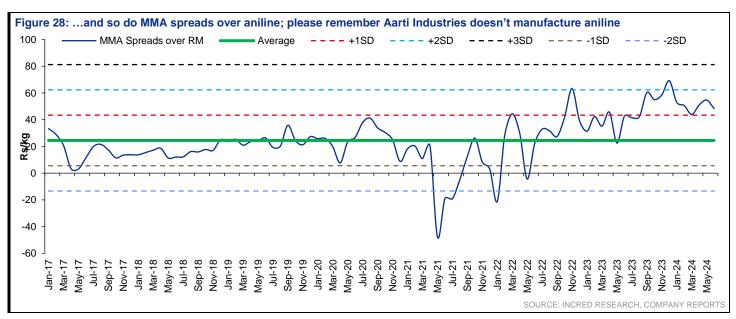
1QFY25F is unlikely to post more than Rs3.1bn in EBITDA ➤

Figure 26: With the likely run rate in 1QFY25F, Aarti Industries will be lucky if it achieves the lower end of its EBITDA guidance for FY25F (Rs m) 1QFY23 2QFY23 3QFY23 4QFY23 1QFY24 2QFY24 3QFY24 4QFY24 FY25Q1F Net Revenue 16.103 16,850 16.677 16.560 14.140 14.540 17.320 17.730 18.453 Total Cost of Goods Sold 9,262 9,781 9,757 9.620 8 530 8.540 11 010 10.710 11,145 Employee Benefit Expenses 910 928 927 1,090 1,010 990 1,030 1,000 1,000 2.670 Other Expenses 3,116 3.471 3,107 3.330 2.580 2,680 3.190 3,190 **Total Expenses** 13.288 14.180 13.790 14.040 12.120 12,200 14.720 14.900 15,335 **EBITDA** 2,815 2,670 2,887 2,520 2,020 2,340 2,600 2,830 3,117 Depreciation 718 729 821 840 890 930 970 980 980 **FBIT** 2,098 1,941 2,066 1,680 1,130 1,410 1,630 1,850 2,137 Other Income 80 80 Interest Expense 445 437 470 330 400 580 540 590 590 Exceptional Items 1,627 1,656 1,504 1,599 1,350 730 830 1,170 1,260 **Profit Before Tax** Total Tax Expenses 301 234 -90 -60 410 Profit After Tax 1,355 1,245 1,365 1,490 690 920 1,240 1,320 1,217 Fully Diluted EPS 1.9 3.4 3.4 3.6 SOURCE: COMPANY REPORTS, INCRED RESEARCH

MMA exports have peaked>

As we had written in our earlier report <u>IN: Chemicals - Overall - Mono methyl</u> <u>aniline - peak is behind us.</u> MMA peak is behind us. This is apparent in the export sales of MMA which are not growing QoQ or MoM.





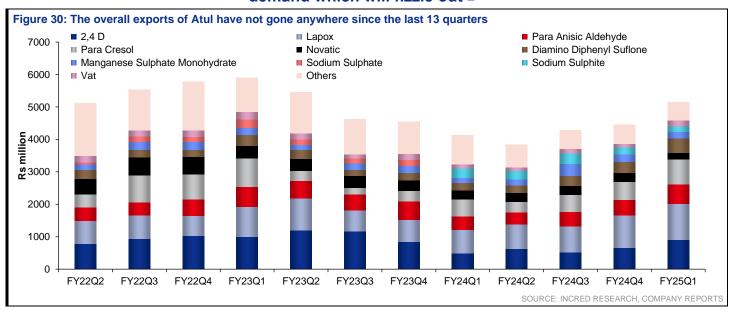


SOURCE: INCRED RESEARCH, COMPANY REPORTS

Atul – Again a very big expectation which won't be met 1QFY25F EPS likely to witness QoQ growth but remain flattish YoY ➤

Figure 29: Exports have witnessed a mild recovery in 1QFY25F, which have been primarily driven by 2,4 D exports due to channelfilling and are unlikely to continue (Rs m) Consolidated Quarterly 1QFY24 2QFY24 3QFY24 4QFY24 Net Revenue 11,820 11,937 11,378 12,122 13,080 Expenditure 9.998 10.385 9.861 10.646 10.996 Raw Material Consumed 5,683 6,114 4.973 5.256 6,671 Purchases of Finished, Semi-Finished Steel 444 546 399 197 (Increase)/Decrease in Stock in Trade 907 873 (68)(220)1,025 1,025 **Employee Cost** 963 978 1,016 2.732 Other Expenditure 2.711 2.831 3.530 3,300 **EBITDA** 1,823 1,552 1,517 1,476 2,085 Other Income 82 221 150 129 100 **Operating Profit** 1.905 1,773 1.667 1,604 2,185 Depreciation 519 540 612 758 758 **EBIT** 1,385 1,233 1,055 847 1,427 Interest 1,215 Profit Before Tax & Exceptional Items 1,365 1,034 796 1,377 **Profit Before Tax** 1,365 1,215 1,034 796 1,377 325 Tax Expense 364 334 242 347 **Net Profit After Tax** 1,001 890 700 554 1,030 **Total Comprehensive Income** 1.021 912 588 1,030 33.83 30.08 23.71 18.77 34.90 4.242.40 3,957.03 4.530.47 4,627.75 5,351.05 Exports Domestic sales 7.577.80 7.980.07 6.847.53 7.493.75 7.729.36

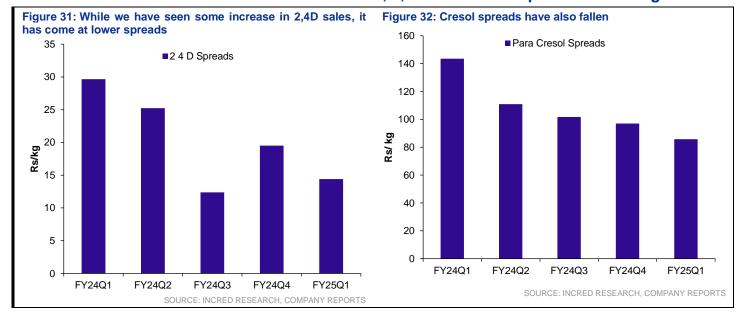
2,4 D has grown but will not continue – it's channel filling-driven demand which will fizzle out ➤







At the same time, 2,4 D and cresol spreads are falling >





DISCLAIMER

This report (including the views and opinions expressed therein, and the information comprised therein) has been prepared by Incred Research Services Private Ltd.(formerly known as Earnest Innovation Partners Private Limited) (hereinafter referred to as "IRSPL"). IRSPL is registered with SEBI as a Research Analyst vide Registration No. INH000011024. Pursuant to a trademark agreement, IRSPL has adopted "Incred Equities" as its trademark for use in this report.

The term "IRSPL" shall, unless the context otherwise requires, mean IRSPL and its affiliates, subsidiaries and related companies. 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 IRSPL and its affiliates/group companies to registration or licensing requirements within such jurisdictions.

This report is being supplied to you strictly on the basis that it will remain confidential. No part of this report may be (i) copied, photocopied, duplicated, stored or reproduced in any form by any means; or (ii) redistributed or passed on, directly or indirectly, to any other person in whole or in part, for any purpose without the prior written consent of IRSPL.

The information contained in this report is prepared from data believed to be correct and reliable at the time of issue of this report.

IRSPL is not required to issue regular reports on the subject matter of this report at any frequency and it may cease to do so or change the periodicity of reports at any time. IRSPL is not under any obligation to update this report in the event of a material change to the information contained in this report. IRSPL has not any and will not accept any, obligation to (i) check or ensure that the contents of this report remain current, reliable or relevant; (ii) ensure that the content of this report constitutes all the information a prospective investor may require; (iii) ensure the adequacy, accuracy, completeness, reliability or fairness of any views, opinions and information, and accordingly, IRSPL and its affiliates/group companies (and their respective directors, associates, connected persons and/or employees) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof.

Unless otherwise specified, this report is based upon reasonable sources. Such sources will, unless otherwise specified, for market data, be market data and prices available from the main stock exchange or market where the relevant security is listed, or, where appropriate, any other market. Information on the accounts and business of company(ies) will generally be based on published statements of the company(ies), information disseminated by regulatory information services, other publicly available information and information resulting from our research. Whilst every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Past performance is not a reliable indicator of future performance. The value of investments may go down as well as up and those investing may, depending on the investments in question, lose more than the initial investment. No report shall constitute an offer or an invitation by or on behalf of IRSPL and its affiliates/group companies to any person to buy or sell any investments.

The opinions expressed are based on information which are believed to be accurate and complete and obtained through reliable public or other non-confidential sources at the time made. (Information barriers and other arrangements may be established where necessary to prevent conflicts of interests arising. However, the analyst(s) may receive compensation that is based on his/their coverage of company(ies) in the performance of his/their duties or the performance of his/their recommendations. In reviewing this report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additional information is, subject to the duties of confidentiality, available on request. The report is not a "prospectus" as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

IRSPL may have issued other reports (based on technical analysis, event specific, short term views etc.) that are inconsistent with and reach different conclusion from the information presented in this report.

Holding of Analysts/Relatives of Analysts, IRSPL and Associates of IRSPL in the covered securities, as on the date of publishing of this report



	Analyst/ Relative	Entity/ Associates
any financial interests in the company covered in this report (subject company) and nature of such financial interest	NO	NO
actual/beneficial ownership of 1% or more in securities of 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;	NO	NO
any other material conflict of interest at the time of publication of the research report or at the time of public appearance	NO	NO
received any compensation from the subject company in the past twelve months for investment banking or merchant banking or brokerage services or investment advisory or depository or distribution from the subject company in the last twelve months for products/services other than investment banking or merchant banking or broker- age services or investment advisory or depository or distribution from the subject company in the last twelve months	NO	NO
managed or co-managed public offering of securities for the subject company in the last twelve months	NO	NO
received any compensation or other benefits from the subject company or third party in connection with the research report	NO	NO
served as an officer, director or employee of the subject company	NO	NO
been engaged in market making activity for the subject company	NO	NO

Analyst declaration

- The analyst responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously in an unbiased manner.
- No part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations(s) or view(s) in this report or based any specific investment banking transaction.
- The analyst(s) has(have) not had any serious disciplinary action taken against him/her(them).
- The analyst, strategist, or economist does not have any material conflict of interest at the time of publication of this report.
- The analyst(s) has(have) received compensation based upon various factors, including quality, accuracy and value of research, overall firm
 performance, client feedback and competitive factors.

IRSPL and/or its affiliates and/or its Directors/employees may own or have positions in securities of the company(ies) covered in this report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities.

IRSPL and/or its affiliates and/or its Directors/employees may do and seek to do business with the company(ies) covered in this research report and may from time to time (a) buy/sell the securities covered in this report, from time to time and/or (b) act as market maker or have assumed an underwriting commitment in securities of such company(ies), and/or (c) may sell them to or buy them from customers on a principal basis and/or (d) may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) and/or (e) solicit such investment, advisory or other services from any entity mentioned in thisreport and/or (f) act as a lender/borrower to such company and may earn brokerage or other compensation. However, Analysts are forbidden to acquire, on their own account or hold securities (physical or uncertificated, including derivatives) of companies in respect of which they are compiling and producing financial recommendations or in the result of which they play a key part.



DISCLAIMER

This report (including the views and opinions expressed therein, and the information comprised therein) has been prepared by Incred Research Services Private Ltd.(formerly known as Earnest Innovation Partners Private Limited) (hereinafter referred to as "IRSPL"). IRSPL is registered with SEBI as a Research Analyst vide Registration No. INH000011024. Pursuant to a trademark agreement, IRSPL has adopted "Incred Equities" as its trademark for use in this report.

The term "IRSPL" shall, unless the context otherwise requires, mean IRSPL and its affiliates, subsidiaries and related companies. 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 IRSPL and its affiliates/group companies to registration or licensing requirements within such jurisdictions.

This report is being supplied to you strictly on the basis that it will remain confidential. No part of this report may be (i) copied, photocopied, duplicated, stored or reproduced in any form by any means; or (ii) redistributed or passed on, directly or indirectly, to any other person in whole or in part, for any purpose without the prior written consent of IRSPL.

The information contained in this report is prepared from data believed to be correct and reliable at the time of issue of this report.

IRSPL is not required to issue regular reports on the subject matter of this report at any frequency and it may cease to do so or change the periodicity of reports at any time. IRSPL is not under any obligation to update this report in the event of a material change to the information contained in this report. IRSPL has not any and will not accept any, obligation to (i) check or ensure that the contents of this report remain current, reliable or relevant; (ii) ensure that the content of this report constitutes all the information a prospective investor may require; (iii) ensure the adequacy, accuracy, completeness, reliability or fairness of any views, opinions and information, and accordingly, IRSPL and its affiliates/group companies (and their respective directors, associates, connected persons and/or employees) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof.

Unless otherwise specified, this report is based upon reasonable sources. Such sources will, unless otherwise specified, for market data, be market data and prices available from the main stock exchange or market where the relevant security is listed, or, where appropriate, any other market. Information on the accounts and business of company(ies) will generally be based on published statements of the company(ies), information disseminated by regulatory information services, other publicly available information and information resulting from our research. Whilst every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Past performance is not a reliable indicator of future performance. The value of investments may go down as well as up and those investing may, depending on the investments in question, lose more than the initial investment. No report shall constitute an offer or an invitation by or on behalf of IRSPL and its affiliates/group companies to any person to buy or sell any investments.

The opinions expressed are based on information which are believed to be accurate and complete and obtained through reliable public or other non-confidential sources at the time made. (Information barriers and other arrangements may be established where necessary to prevent conflicts of interests arising. However, the analyst(s) may receive compensation that is based on his/their coverage of company(ies) in the performance of his/their duties or the performance of his/their recommendations. In reviewing this report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additional information is, subject to the duties of confidentiality, available on request. The report is not a "prospectus" as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

IRSPL may have issued other reports (based on technical analysis, event specific, short term views etc.) that are inconsistent with and reach different conclusion from the information presented in this report.

Holding of Analysts/Relatives of Analysts, IRSPL and Associates of IRSPL in the covered securities, as on the date of publishing of this report



	Analyst/ Relative	Entity/ Associates
any financial interests in the company covered in this report (subject company) and nature of such financial interest	NO	NO
actual/beneficial ownership of 1% or more in securities of 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;	NO	NO
any other material conflict of interest at the time of publication of the research report or at the time of public appearance	NO	NO
received any compensation from the subject company in the past twelve months for investment banking or merchant banking or brokerage services or investment advisory or depository or distribution from the subject company in the last twelve months for products/services other than investment banking or merchant banking or broker- age services or investment advisory or depository or distribution from the subject company in the last twelve months	NO	NO
managed or co-managed public offering of securities for the subject company in the last twelve months	NO	NO
received any compensation or other benefits from the subject company or third party in connection with the research report	NO	NO
served as an officer, director or employee of the subject company	NO	NO
been engaged in market making activity for the subject company	NO	NO

Analyst declaration

- The analyst responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his
 or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and
 autonomously in an unbiased manner.
- No part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations(s) or view(s) in this report or based any specific investment banking transaction.
- The analyst(s) has(have) not had any serious disciplinary action taken against him/her(them).
- The analyst, strategist, or economist does not have any material conflict of interest at the time of publication of this report.
- The analyst(s) has(have) received compensation based upon various factors, including quality, accuracy and value of research, overall firm
 performance, client feedback and competitive factors.

IRSPL and/or its affiliates and/or its Directors/employees may own or have positions in securities of the company(ies) covered in this report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities.

IRSPL and/or its affiliates and/or its Directors/employees may do and seek to do business with the company(ies) covered in this research report and may from time to time (a) buy/sell the securities covered in this report, from time to time and/or (b) act as market maker or have assumed an underwriting commitment in securities of such company(ies), and/or (c) may sell them to or buy them from customers on a principal basis and/or (d) may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) and/or (e) solicit such investment, advisory or other services from any entity mentioned in thisreport and/or (f) act as a lender/borrower to such company and may earn brokerage or other compensation. However, Analysts are forbidden to acquire, on their own account or hold securities (physical or uncertificated, including derivatives) of companies in respect of which they are compiling and producing financial recommendations or in the result of which they play a key part.