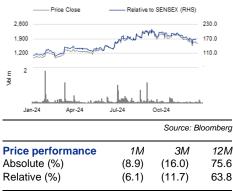
India

REDUCE (previously ADD)

Consensus ratings*: Buy	2 Hold 1 Sell 0
Current price:	Rs1,692
Target price: V	Rs1,206
Previous target:	Rs2,151
Up/downside:	-28.7%
InCred Research / Consens	sus: -24.4%
Reuters:	
Bloomberg:	EPIGRAL IN
Market cap:	US\$1,005m
	Rs72,978m
Average daily turnover:	US\$3.8m
	Rs277.7m
Current shares o/s:	41.6m
Free float:	28.6%
*Source: Bloomberg	



Major shareholders	% held
Promoter & Promoter Group	71.4
Dimensional Fund Advisors LP	0.5
BlackRock Inc	0.1

Research Analyst(s)



Satish KUMAR T (91) 22 4161 1562 E satish.kumar@incredresearch.com Abbas PUNJANI T (91) 22 4161 1598 E abbas.punjani@incredresearch.com

Epigral Ltd

Chemicals - Overall | India | January 24, 2025

Peak EPS growth is behind us; REDUCE

- ECH to face pricing headwinds due to global oversupply, slowing epoxy demand and competitive pressure from propylene-based production.
- Caustic soda prices are likely to remain steady, supported by reduced imports, energy-driven challenges in Europe, and steady domestic demand.
- EPS likely to remain stagnant due to ECH weakness, despite relative strength in caustic soda, leads us to cut our target price to Rs1,206.

ECH prices can come under pressure in the coming months

Epichlorohydrin (ECH) presents a unique import substitution opportunity for Epigral, particularly with its plan to aggressively expand production capacity in India. However, the global ECH market faces oversupply challenges, with the current global demand at ~2.26 mt (growing at a 3–4% CAGR) against a capacity of 3.4–4mt. This imbalance, coupled with slowing demand for epoxy resins (the primary consumer of ECH), is expected to depress the spreads further. India imports a significant volume of ECH from Thailand, but as Epigral doubles its capacity, domestic oversupply may intensify. Additionally, the glycerine-based ECH production route, which Epigral employs, may face margin pressure as global propylene prices decline, making propylene-based production more competitive.

New chlorotoluene will face competitive pressure in India...

In the chlorotoluene market, multiple new capacities from Epigral and Aarti Industries are set to come online, but the Indian import substitution opportunity is limited, with domestic demand at only ~3,200t annually. Consequently, these new capacities will likely target export markets. Chlorotoluene is an intermediate used in industries such as agriculture, pharmaceuticals, and specialty chemicals. However, like many other commodities, chlorotoluene's spreads have declined post-Covid, reflecting the broader challenges of overcapacity and reduced demand.

...but caustic soda market may remain strong

In contrast, the caustic soda market shows more resilient pricing dynamics, especially in India. Global overcapacity persists, but falling imports & reduced exports from regions like Europe, particularly Germany, due to energy challenges, have kept Indian prices elevated. Although a collapse to historical lows (e.g., Rs30/kg) is unlikely, moderate levels around Rs40/kg are expected to sustain, supported by lower energy prices and new capacity addition in India and China. The global operating rate of caustic soda remains heavily influenced by chlorine usage, which may see an improvement with mild economic recovery.

EPS to remain stagnant; downgrade to REDUCE with TP at Rs1,206

Earnings growth will be difficult to come by and the relative strength in caustic soda will be counterbalanced by weakness in ECH. EBITDA is likely to grow at a 3% CAGR over FY25F-27F. We value the stock at 15x FY27F EPS to arrive at our target price of Rs1,206.

Financial Summary	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
Revenue (Rsm)	21,884	25,168	25,412	27,292	33,768
Operating EBITDA (Rsm)	6,889	6,809	6,625	7,167	8,830
Net Profit (Rsm)	3,533	3,436	3,181	3,470	4,635
Core EPS (Rs)	85.0	81.1	73.7	80.4	107.4
Core EPS Growth	39.8%	(4.6%)	(9.1%)	9.1%	33.6%
FD Core P/E (x)	19.90	20.85	22.94	21.03	15.75
DPS (Rs)	0.0	0.0	0.0	0.0	0.0
Dividend Yield	0.00%	0.00%	0.00%	0.00%	0.00%
EV/EBITDA (x)	11.45	11.92	11.79	10.62	8.21
P/FCFE (x)	51.62	50.25	28.25	26.12	16.57
Net Gearing	80.5%	76.2%	22.9%	12.0%	(1.7%)
P/BV (x)	6.57	5.82	3.25	2.81	2.39
ROE	39.4%	29.6%	18.2%	14.3%	16.4%
% Change In Core EPS Estimates					
InCred Research/Consensus EPS (x)					

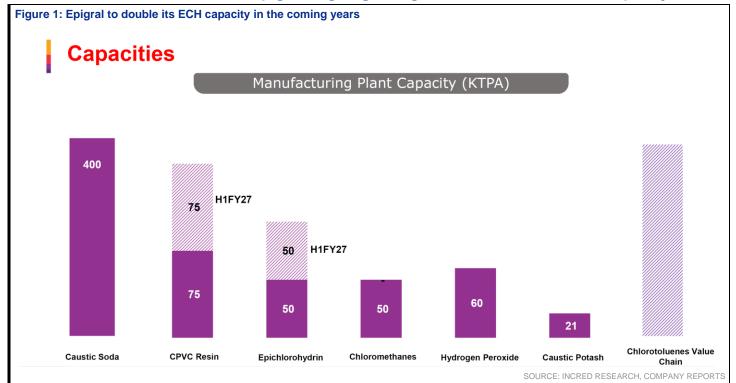
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Peak EPS growth is behind us; REDUCE

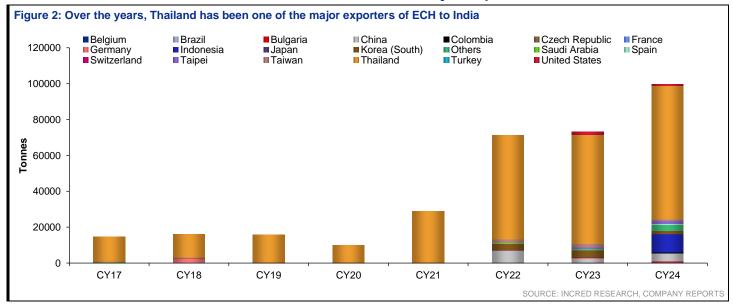
ECH - Unique import substitution opportunity, but spreads will fall

ECH (epichlorohydrin) is the unique import substitution opportunity for Epigral; however, please note that it is the oversupplied commodity in the global market and hence, its prices are likely to fall. Also remember that Indian imports of ECH are rising from Thailand. Epigral is increasing its ECH capacity in India, which is bound to increase overall supply of the commodity in the Indian market.

Epigral is going for agressive increase in ECH capacity >



Thailand is one of the major exporters of ECH to India >



Global demand for ECH was ~2.16mt in 2024 ➤

Global demand for ECH is around 2.26mt and it's growing @3-4% CAGR. As the principal usage of the product is directly linked to the global economy, its demand is directly dependent on overall global growth.

- 1. Epoxy resins (over 75% of ECH demand) are used in paints, coatings, adhesives, and composites.
- 2. They are used in water treatment chemicals.
- 3. They are also used in pharmaceuticals and other minor applications.

Global capacity of ECH is around 3.4-4mt ➤

China is the largest producer, with a combined capacity of over 1.2-1.5mtpa from multiple players. Global capacity is ~3.5-4mtpa, with demand at ~1.8-2.2mtpa, leading to overcapacity in certain regions (notably China). Here's a list of key global producers of epichlorohydrin (ECH) along with their estimated production capacities (in mt per year):

Asia-Pacific

1. China

- Jiangsu Yangon Chemical Group Capacity: ~200,000–250,000tpa. It is one of China's largest ECH producers.
- Shandong Haili Chemical Industry Capacity: ~250,000tpa. Uses glycerine-based and propylene-based production routes.
- Zhejiang Transfar Capacity: ~150,000–200,000tpa. Focused on both domestic supply and exports.

2. Other Asia-Pacific regions

- SP Chemicals (Singapore) Capacity: ~120,000tpa. It is a major supplier in Southeast Asia.
- Tamilnadu Petroproducts (TPL) (India) Capacity: ~20,000–30,000tpa. Limited capacity, catering mostly to the domestic market.
- Epigral (India) Capacity -50,000t.

3. Europe

- Solvay (Thailand and Europe plants)- Global Capacity: ~230,000tpa (combined). Focus on bio-based (glycerine) production technology.
- Dow Chemical (Germany) Capacity: ~100,000–150,000tpa. Advanced propylene-based production in Europe.

4. North America

- Westlake Chemical Capacity: ~250,000tpa. Major player with operations in the US and strong focus on epoxy resin production chains.
- Olin Corporation Capacity: ~150,000tpa. Meets internal consumption need for epoxy resin and also caters to external markets.

5. Middle East

• SABIC (Saudi Arabia) - Capacity: ~100,000–120,000tpa. Focuses on regional demand and global exports.

6. Emerging players

 Advanced Biochemical (Thailand) - Capacity: ~100,000tpa. A pioneer in glycerine-based bio-ECH, with a growing market share.

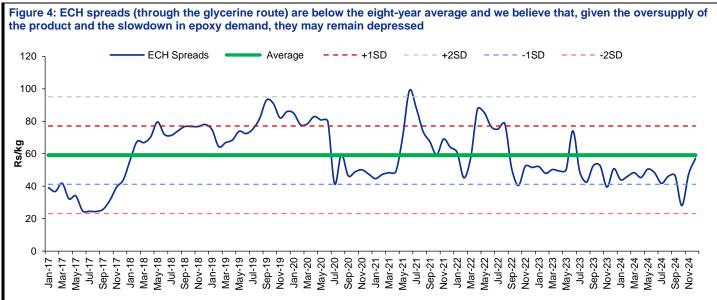
There are two routes to make ECH: 1) crude glycerine distallation, and 2) propylene >

1. Glycerin-Based Route - Crude glycerin (a byproduct of biodiesel production) is purified and reacts with hydrochloric acid (HCl) to produce ECH.

This method is considered more environmentally friendly than the propylenebased route. 2. Propylene-Based Route - Propylene reacts with chlorine to form alkyl chloride, which is further converted to ECH through reaction with hypochlorous acid or other chlorinating agents.

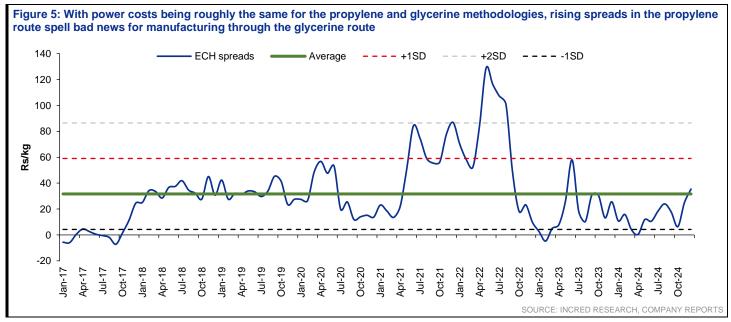
Figure 3: The glycerin-based re	oute is preferable these days	
Comparison of the two routes		
Parameter	Glycerin-Based	Propylene-Based
Feedstock	Renewable (biodiesel byproduct)	Non-renewable (petrochemical)
Environmental Impact	Low (fewer emissions)	High (waste and emissions)
Economic Viability	Dependent on biodiesel trend	Dependent on propylene prices
Market Preference	Gaining traction in Europe/Asia	Widely used globally
Capex Requirements	Moderate-to-high	High
	·	SOURCE: INCRED RESEARCH, COMPANY REPORTS

Propylene, being more volatile, is leading new players to prefer the glycerine route ➤



SOURCE: INCRED RESEARCH, COMPANY REPORTS

However, as petrochemicals remain in oversupply, leading to a decline in propylene prices, ECH's spreads over propylene will rise, exerting pressure on overall prices **>**

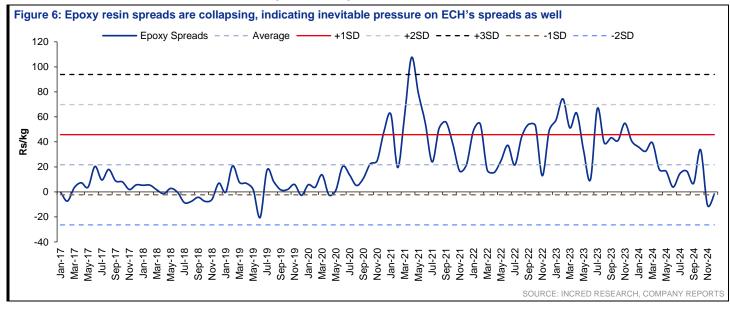


ECH is primarily used in epoxy resins, whose demand is currently witnessing a slowdown >

ECH (epichlorohydrin) is a key raw material in the production of epoxy resins. With global epoxy resin capacity exceeding demand, as we noted earlier, the market for ECH is also under pressure. A slowdown in epoxy resin demand, driven by weak construction, automotive, and electronics sectors, particularly in China and other major markets, directly impacts ECH consumption.

The oversupply in epoxy resins creates a ripple effect, reducing the margin for ECH producers. Additionally, the increased adoption of glycerine-based ECH production method, like those employed by Epigral in India, adds more capacity, further exacerbating the oversupply situation.

The slowdown in epoxy resin demand is leading to a decline in epoxy resin gross margin per kg, which will, in turn, result in a drop in ECH prices ➤



Chlorotoluene - multiple new capacities coming online, which is negative for Epigral

There are multiple new capacities coming online in the chlorotoluene space. Epigral's 15k capacity in India will be coming online alongside Aarti Industries' new capacity. Please note that for both companies, the market is assuming sales equal to N times the capex, but the Indian import substitution market for chlorotoluene is only 3,000–4,000t.

Chlorotoluene has multiple usage ➤

Chlorotoluenes are a group of chemical compounds that are widely used as intermediates in the production of various industrial and consumer products. Here are some of their applications:

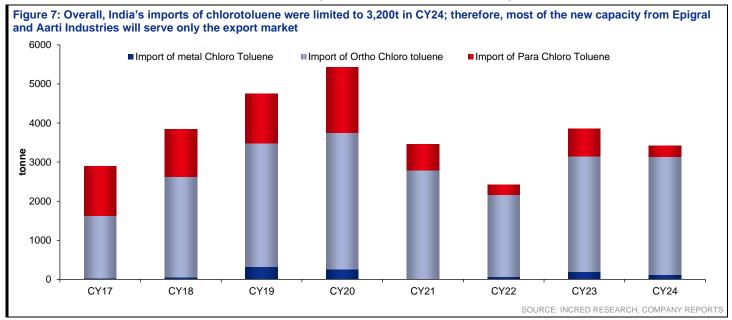
- 1. **Agricultural chemicals**: They are used in the synthesis of herbicides, pesticides, and fungicides.
- 2. **Pharmaceuticals**: Chlorotoluene serves as an intermediate in the production of certain pharmaceuticals.
- 3. **Dyes and pigments**: They are used in the manufacture of dyes and pigments for textiles and inks.
- 4. **Polymers and resins**: These compounds are utilized in the production of polymers and resins, which are used in coatings and adhesives.
- 5. **Specialty chemicals**: Chlorotoluene is employed in the synthesis of fine chemicals and specialty chemicals

There are three kinds of chlorotoluene - ortho, para and meta >

Ortho, meta, and para refer to the positions of substituents on a benzene ring. In the case of toluene (methylbenzene), these terms can describe the locations of additional functional groups attached to the benzene ring.

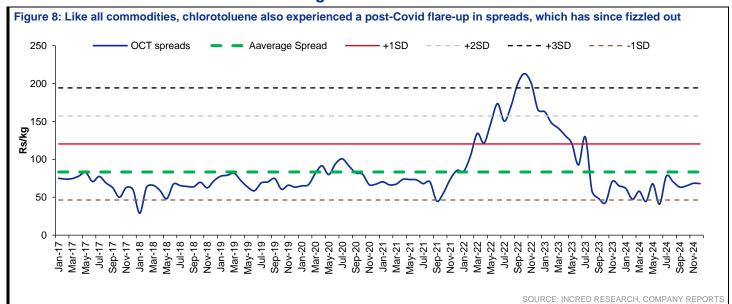
- 1. **Ortho (o-) toluene**: This refers to a compound where a second substituent is attached to the carbon atoms adjacent to the carbon where the methyl group is located (the 1 and 2 positions).
- 2. **Meta (m-) toluene**: In this case, the second substituent is located on the carbon atom that is one carbon away from the methyl-substituted carbon (the 1 and 3 positions).
- 3. **Para (p-) toluene**: Here, the second substituent is situated directly opposite the methyl group on the benzene ring (the 1 and 4 positions).

These positional isomers can exhibit different chemical properties and reactivities due to the varying steric and electronics associated with their arrangements. In the chemical reaction to manufacture these isomers form in different quantities. The most prevalent chlorotoluene is ortho toluene.



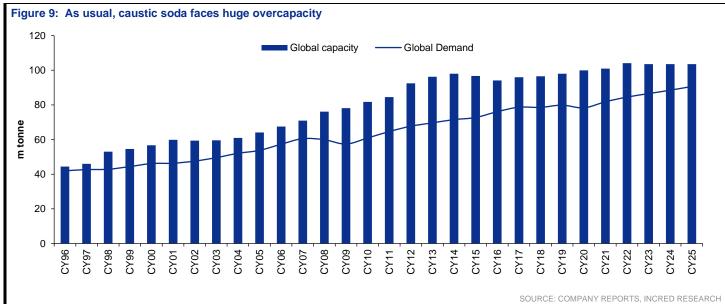
Indian imports of ortho, meta and para toleune is small >

At the same time, chlorotoluene's spreads over its raw material are falling **>**

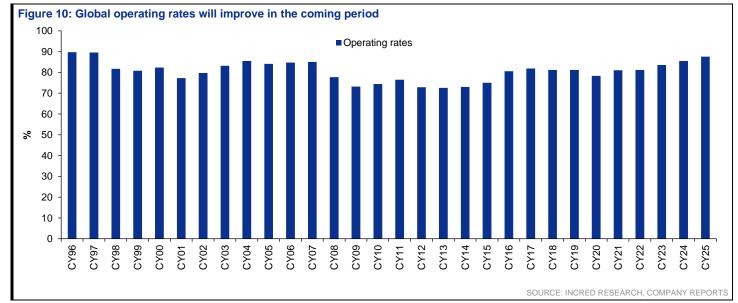


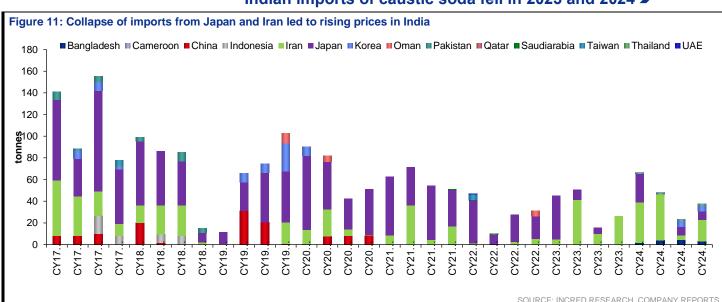
Caustic soda can remain strong for long





The global operating rate depends upon usage of chlorine, but please note that global slowdown leads to lower chlorine usage and hence, lower operating rates ➤

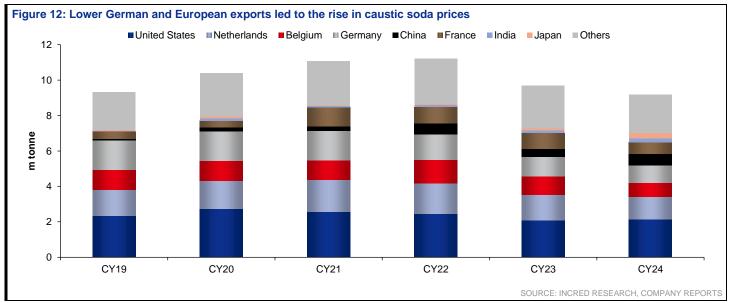




Indian imports of caustic soda fell in 2023 and 2024 >

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Global exports declined; however, lower energy prices and even a mild cyclical recovery will lead to increased exports >

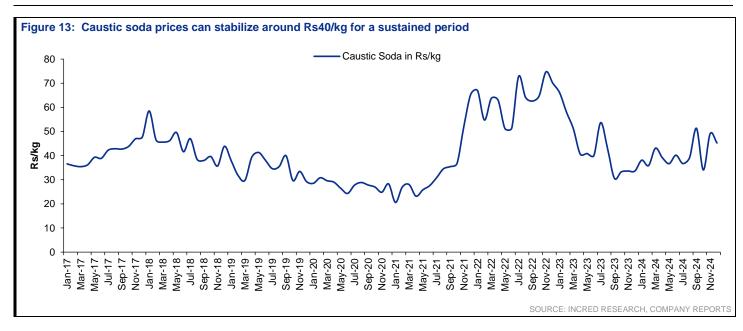


Remember, Germany cannot replace Russian gas fully by LNG and it lacks LNG terminals and at the same time, reverse flow in the European gas grid is not possible. This leads us to believe that German caustic soda exports are unlikely to recover in the near term. However, overall global supply is likely to go up from increased Chinese and Indian capacities

At the same time, we believe that caustic can remain elevated from its historical level for a long time >

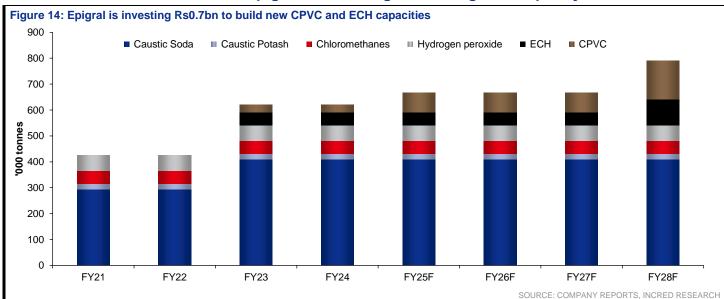
While the prices level of Rs70/kg is not possible to come by; however, price level of Rs30/kg is also unlikely in the Indian market. We expect the prices to remain around Rs40/kg for the next two-to-three years.

Chemicals - Overall | India Meghmani Finechem Ltd | January 24, 2025

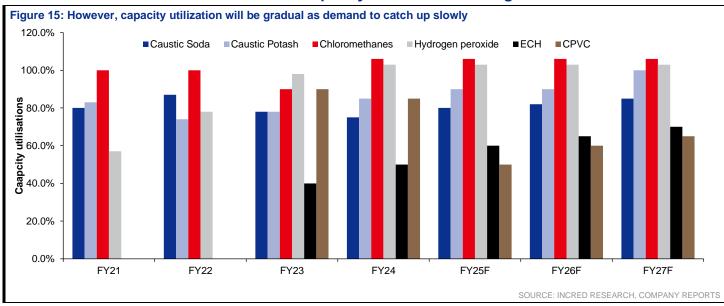


Earnings and valuation

While gross margin may decline, we do not anticipate any significant drop in gross profit per kg. However, higher depreciation and interest costs will keep the overall EPS under pressure. We do not foresee any EPS growth for the next couple of years, indicating that the company is becoming ex-growth. Although we assign a P/E multiple of 20, the stock could face a derating going ahead as earnings growth becomes increasingly difficult to achieve.

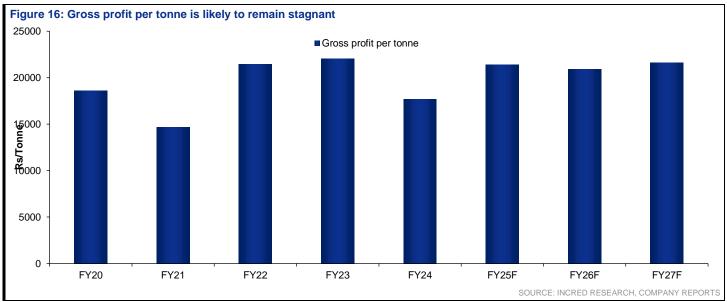


Epigral is investing in building new capacity >

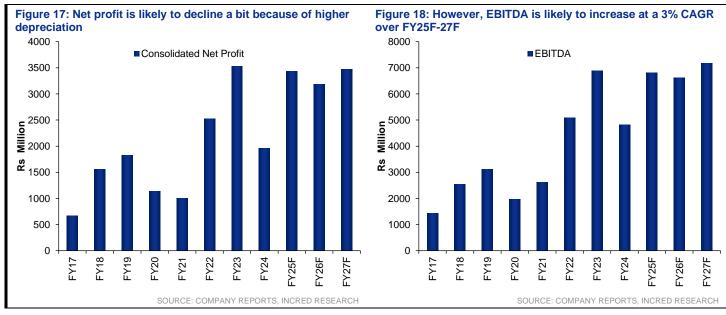


Rise in capacity utilization will be gradual ➤

Gross profit/tonne to remain stable as the fall in caustic soda to be counterbalanced by the rise in other products' margins ➤



Higher depreciation will lead to stagnant EPS ➤



Stock normally trades at 15x one-year forward P/E ➤

Epigral normally trades at 15x one-year forward EPS. We valued the stock at the same level, at FY27F EPS, to arrive at our target price of Rs1,206. We downgrade the stock's rating to HOLD (from ADD).

Chemicals - Overall | India Meghmani Finechem Ltd | January 24, 2025



Figure 20: With the stock turning ex-growth, the P/E derating is likely and hence, we value it at its historical mean to arrive at our target price of Rs1,206 Target price calculation

FY27F EPS (Rs)

P/E (x)

One-year forward target price (Rs)

SOURCE: INCRED RESEARCH, COMPANY REPORTS

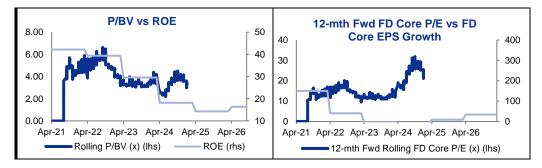
80

15

1,206

Chemicals - Overall | India Meghmani Finechem Ltd | January 24, 2025

BY THE NUMBERS



(Rs mn)	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
Total Net Revenues	21,884	25,168	25,412	27,292	33,768
Gross Profit	10,736	11,326	11,435	12,281	14,858
Operating EBITDA	6,889	6,809	6,625	7,167	8,830
Depreciation And Amortisation	(1,090)	(1,511)	(1,668)	(1,824)	(1,929)
Operating EBIT	5,800	5,298	4,957	5,343	6,901
Financial Income/(Expense)	(655)	(769)	(769)	(769)	(769)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	80	65	65	65	65
Profit Before Tax (pre-El)	5,225	4,594	4,253	4,639	6,196
Exceptional Items					
Pre-tax Profit	5,225	4,594	4,253	4,639	6,196
Taxation	(1,692)	(1,158)	(1,072)	(1,169)	(1,561)
Exceptional Income - post-tax					
Profit After Tax	3,533	3,436	3,181	3,470	4,635
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	3,533	3,436	3,181	3,470	4,635
Recurring Net Profit	3,533	3,436	3,181	3,470	4,635
Fully Diluted Recurring Net Profit	3,533	3,436	3,181	3,470	4,635

Cash Flow					
(Rs mn)	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
EBITDA	6,889	6,809	6,625	7,167	8,830
Cash Flow from Invt. & Assoc.					
Change In Working Capital	408	(384)	(35)	(269)	(928)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	(41)	(11)			
Other Operating Cashflow	735	(1,162)	835	835	835
Net Interest (Paid)/Received	(655)	(769)	(769)	(769)	(769)
Tax Paid	(1,075)	(505)	(1,072)	(1,169)	(1,561)
Cashflow From Operations	6,262	3,977	5,583	5,794	6,405
Capex	(4,165)	(3,984)	(3,000)	(3,000)	(2,000)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(208)	(27)			
Cash Flow From Investing	(4,372)	(4,011)	(3,000)	(3,000)	(2,000)
Debt Raised/(repaid)	(528)	1,460			
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(242)	(251)			
Preferred Dividends					
Other Financing Cashflow	(1,228)	(1,285)	(769)	(769)	(769)
Cash Flow From Financing	(1,998)	(76)	(769)	(769)	(769)
Total Cash Generated	(108)	(110)	1,814	2,025	3,636
Free Cashflow To Equity	1,362	1,426	2,583	2,794	4,405
Free Cashflow To Firm	2,544	735	3,353	3,564	5,175

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Chemicals - Overall | India Meghmani Finechem Ltd | January 24, 2025

BY THE NUMBERS...cont'd

(Rs mn)	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
Total Cash And Equivalents	151	68	4,488	6,513	10,149
Total Debtors	1,663	1.788	2,355	2,529	3,129
Inventories	2.118	2.630	3.464	3.721	4,603
Total Other Current Assets	2,118	2,030	534	534	4,603
Total Current Assets	4,194	5.019	10,841	13,296	18,415
Fixed Assets	19,622	22.495	27,145	28,321	28,392
Total Investments	206	22,495	27,145	20,321	20,392
Intangible Assets	206	206	206	206	206
	300	223	223	223	223
Total Other Non-Current Assets Total Non-current Assets					
	20,128	22,924	27,574	28,750	28,821
Short-term Debt	3,315	4,156	4,156	4,156	4,156
Current Portion of Long-Term Debt Total Creditors	1 100	4.050	0.477	0.000	0.000
	1,102	1,653	2,177	2,338	2,893
Other Current Liabilities	2,060	1,986	1,986	1,986	1,986
Total Current Liabilities	6,476	7,796	8,320	8,481	9,036
Total Long-term Debt	5,446	5,470	5,470	5,470	5,470
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	13	1	1	1	1
Total Non-current Liabilities	5,460	5,471	5,471	5,471	5,471
Total Provisions	1,695	2,135	2,135	2,135	2,135
Total Liabilities	13,631	15,402	15,927	16,088	16,643
Shareholders Equity	10,692	12,541	22,488	25,958	30,593
Minority Interests					
Total Equity	10,692	12,541	22,488	25,958	30,593
Key Ratios					
	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
Revenue Growth	41.1%	15.0%	1.0%	7.4%	23.7%
Operating EBITDA Growth	35.2%	(1.2%)	(2.7%)	8.2%	23.2%
On exercise of EDITDA Mension	0 4 EQ4			00.00/	
Operating EBITDA Margin	31.5%	27.1%	26.1%	26.3%	26.1%
Net Cash Per Share (Rs)	(207.23)	27.1% (221.57)	26.1% (119.11)	(72.18)	26.1%
1 0 0					
Net Cash Per Share (Rs)	(207.23)	(221.57)	(119.11)	(72.18)	12.09 709.13
Net Cash Per Share (Rs) BVPS (Rs)	(207.23) 257.30	(221.57) 290.69	(119.11) 521.27	(72.18) 601.70	12.09
Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate	(207.23) 257.30 8.85	(221.57) 290.69 6.89	(119.11) 521.27 6.44	(72.18) 601.70 6.94	12.09 709.13 8.97
Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover	(207.23) 257.30 8.85	(221.57) 290.69 6.89	(119.11) 521.27 6.44 25.2%	(72.18) 601.70 6.94	12.09 709.13 8.97
Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days	(207.23) 257.30 8.85 32.4%	(221.57) 290.69 6.89 25.2%	(119.11) 521.27 6.44	(72.18) 601.70 6.94 25.2%	12.09 709.13 8.97 25.2% 30.58
Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days	(207.23) 257.30 8.85 32.4% 35.25 59.91	(221.57) 290.69 6.89 25.2% 25.02	(119.11) 521.27 6.44 25.2% 29.75 79.58	(72.18) 601.70 6.94 25.2% 32.65	12.09 709.13 8.97 25.2% 30.58 80.33
Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days	(207.23) 257.30 8.85 32.4% 35.25 59.91 32.46	(221.57) 290.69 6.89 25.2% 25.02 62.60 36.32	(119.11) 521.27 6.44 25.2% 29.75 79.58 50.01	(72.18) 601.70 6.94 25.2% 32.65 87.35 54.90	12.09 709.13 8.97 25.2% 30.58 80.33 50.49
Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days	(207.23) 257.30 8.85 32.4% 35.25 59.91	(221.57) 290.69 6.89 25.2% 25.02 62.60	(119.11) 521.27 6.44 25.2% 29.75 79.58	(72.18) 601.70 6.94 25.2% 32.65 87.35	12.09 709.13 8.97 25.2%

SOURCE: INCRED RESEARCH, COMPANY REPORTS

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. While 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 is believed to be accurate and complete and obtained through reliable public or other nonconfidential 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 a 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

Research Analyst or his/her relative(s) or InCred Research Services Private Limited or our associate may have any financial interest in the subject company.

Research Analyst or his/her relatives or InCred Research Services Limited or our associates may have actual or beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of the Research Report.

Research Analyst or his/her relative or InCred Research Services Private Limited or our associate entities may have any other material conflict of interest at the time of publication of the Research Report.

In the past 12 months, IRSPL or any of its associates may have:

- a) Received any compensation/other benefits from the subject company,
- b) Managed or co-managed public offering of securities for the subject company,
- c) Received compensation for investment banking or merchant banking or brokerage services from the subject company,
- d) Received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company

We or our associates may have received compensation or other benefits from the subject company(ies) or third party in connection with the research report.

Research Analyst may have served as director, officer, or employee in the subject company.

We or our research analyst may engage in market-making activity of the subject company.

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 on 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 this report 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.

InCred Research Services Private Limited

Research Analyst SEBI Registration Number: INH000011024

Registered Office: Unit No 1203, 12th Floor, B Wing, The Capital, C-70, G Block, BKC, Bandra (E), Mumbai – 400051 Phone: +91-22-6844-6100 Corporate Office: 05th floor, Laxmi Towers, Plot No. C-25, G Block, Bandra – Kurla Complex, Bandra (East), Mumbai – 400051 Phone: +91-22-4161-1500 Name of the Compliance Officer: Mr. Yogesh Kadam Email ID: compliance@incredresearch.com, Phone No: +91-22-41611539 For any queries or grievances, you may contact the Grievance Officer. Name of the Grievance Officer: Mr. Rajarshi Maitra Phone no. +91-022-41611546 Email ID: rajarshi.maitra@incredresearch.com CIN: U74999MH2016PTC287535

Recommendation	Framework
Stock Ratings	Definition:
Add	The stock's total return is expected to exceed 10% over the next 12 months.
Hold	The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
Reduce	The stock's total return is expected to fall below 0% or more over the next 12 months.
	eturn of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net e stock. Stock price targets have an investment horizon of 12 months.
Sector Ratings	Definition:
Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.
Country Ratings	Definition:
Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.