

# **Chemicals**

## Refer to our recent reports







## Short-term uptick in chemical prices unsustainable

- Most of the chemical stocks on 9th Jan'25 gained to the tune of 2-14% in anticipation of an increase in chemical prices (owing to Chinese New Year) and some specific news items (increase in Ref Gas price by a large US supplier).
- Prices of major chemicals that we track have been subdued for the past few months, indicating persistent pricing pressure in the sector. Export realization has also seen a meaningful double-digit decline for most companies in 3Q.
- We remain largely negative to neutral on the sector, with only pockets of growth being seen in our coverage universe as of now. We have a BUY rating on ATLP, GALSURF, PI and VO and a Sell rating on FINEORG.

## Stock run-up unsustainable in short to medium term

- Most chemical stocks moved up 2-14% on 9th Jan'25, mainly due to the anticipation that chemical prices would rise in the coming month because of the Chinese New Year holidays starting later in Jan'25. Every year during these holidays, there are some capacity shutdowns in January, due to which chemical prices see an uptrend until the Chinese capacities are back and running.
- Stock prices of SRF/NFIL were up ~14%/~9% as a large US supplier said it is going to increase prices with immediate effect. This player is said to have the largest import quota for Ref Gas in the US, because of which it is anticipated that other players would also increase their prices, including SRF and NFIL. The companies in their last concalls said that they were seeing a gradual recovery in the Ref Gas market, including in prices.
- SRF has a capacity of ~30ktpa of R32 and NFIL has a capacity of ~4.5ktpa. NFIL is expected to double its capacity in FY26. In a late-night <u>press release</u> on 9th Jan'25, SRF said that the news of the price hike is in context of the US market. Changes in prices of Ref Gas for SRF would depend on demand-supply dynamics. Our conversation with NFIL also suggests the same.
- Amine stocks, BLA (Balaji Amines) and AACL, were also up ~10%/~8% on the same day. Acetic Acid/Ammonia prices are up 5%/2% MoM in Jan'25 to date, in anticipation that there could be an increase in selling prices. In our interaction with the management, it was indicated that nothing unusual has taken place, except for the Chinese New Year, which would slow down imports and it happens every year.

## Prices remain subdued with no significant demand improvement

Prices of major chemicals that we track are subdued in Jan'25 so far, with Phenol/IPA/ Isobutanol/ Caustic Soda flakes/ Sulphuric Acid down 4%/3%/1%/8%/12% MoM. Blended Phenol + Acetone spread is down 4% MoM. ACN and Acetone prices are flat MoM. Prices of Toluene (Korea)/Propylene (Korea) decreased 9%/1% YoY in Dec'24.

A steady increase in demand has also not materialized over the past few quarters, further contributing to the lack of price movement. Geopolitical tensions, including the Red Sea crisis, have been driving container and freight rates higher in the near term. Managements of various companies have earlier said that a meaningful recovery could be seen in 2HFY25, which looks unlikely.

Though there was a YoY uptick in export volumes in the first two months of 3QFY25, export realization witnessed a meaningful double-digit decline for most companies. This indicates that pricing pressure persists in the sector. Some managements have hinted at possible pricing pressures in CY25. Subsequently, capacity expansions have also been delayed by various companies.

### Valuation and view

- Vinati Organics (VO): The stock is trading at ~33x FY26E EPS of INR51.9 and ~24x FY26E EV/EBITDA. It had a fixed asset turnover of 1.5x as of FY24. We continue to believe that VO's long-term growth outlook is healthy. We value VO at 45x Dec'26E EPS to arrive at our TP of INR2,655. We reiterate our BUY rating on the stock.
- Galaxy Surfactants (GALSURF): We estimate a volume CAGR of 9% over FY24-27, fueled by robust volumes in the domestic market and a recovery in the specialty care product volumes in the developed markets, which have already started growing. The stock is currently trading at ~21x FY26E EPS of INR118.3 and ~13x FY26E EV/EBITDA. We value the company at 25x Dec'26E EPS to arrive at a TP of INR3,350. We reiterate our BUY rating on the stock.

Exhibit 1: The sector trades at 32.5x one year forward P/E

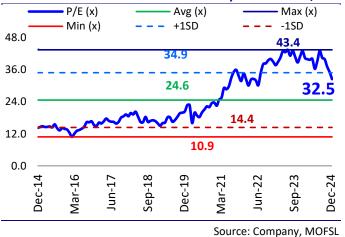
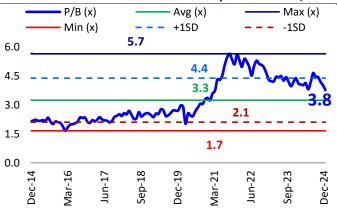


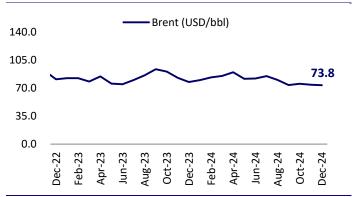
Exhibit 2: The sector trades at 3.8x one year forward P/B



Company, MOFSL Source: Company, MOFSL

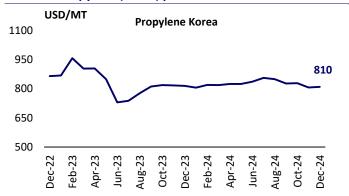
# Trends in key chemical prices

Exhibit 3: Brent crude price down 5% YoY



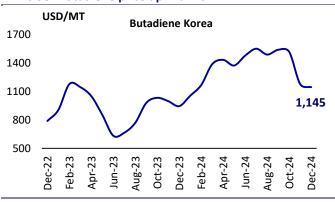
Source: Reuters, MOFSL

Exhibit 4: Propylene (Korea) price down 1% YoY



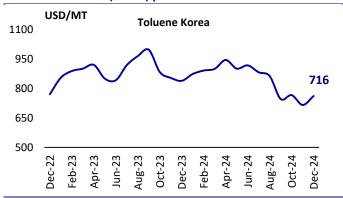
Source: Bloomberg, MOFSL

Exhibit 5: Butadiene price up 21% YoY



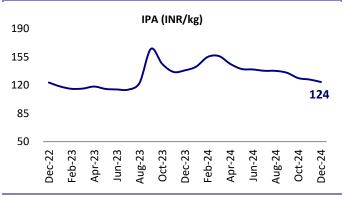
Source: Bloomberg, MOFSL

Exhibit 6: Toluene (Korea) price down 9% YoY



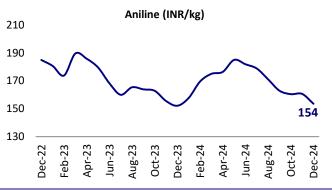
Source: Bloomberg, MOFSL

**Exhibit 7: IPA price down 10% YoY** 



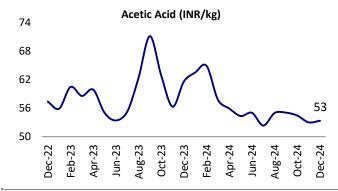
Source: IndiaPetroChem, MOFSL

Exhibit 8: Aniline price up 1% YoY



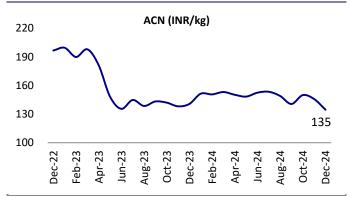
Source: IndiaPetroChem, MOFSL

Exhibit 9: Acetic Acid price down 13% YoY



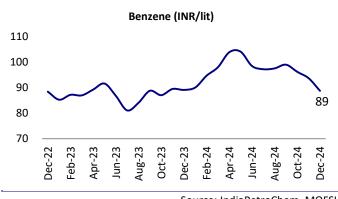
Source: IndiaPetroChem, MOFSL

Exhibit 10: ACN price down 4% YoY



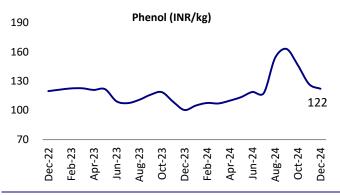
Source: IndiaPetroChem, MOFSL

Exhibit 11: Benzene price flat YoY



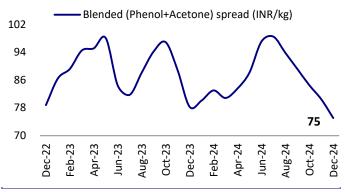
Source: IndiaPetroChem, MOFSL

Exhibit 12: Phenol price up 22% YoY



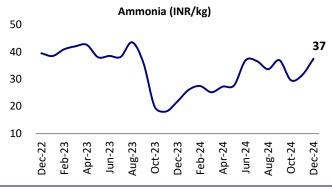
Source: IndiaPetroChem, MOFSL

Exhibit 13: Acetone price up 20% YoY



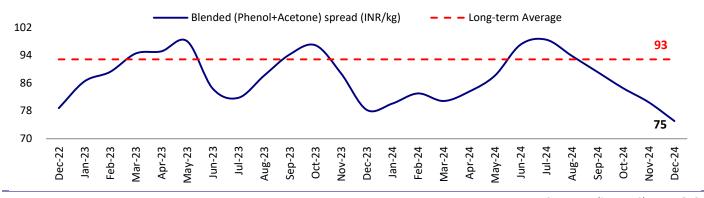
Source: IndiaPetroChem, MOFSL

Exhibit 14: Ammonia price up 72% YoY



Source: IndiaPetroChem, MOFSL

Exhibit 15: Blended Phenol and Acetone spread down 4% YoY



Source: IndiaPetroChem, MOFSL

4

9 January 2025

## Exhibit 16: Caustic Soda Lye price up 39% YoY

#### Caustic Soda Lye (INR/kg) 58 42 46 34 22 10 Dec-24 Dec-22 Feb-23 Jun-23 Oct-24 Aug-23 Oct-23 Dec-23 Feb-24 Apr-24 Jun-24

Source: IndiaPetroChem, MOFSL

Exhibit 17: Caustic Soda Flakes price up 23% YoY

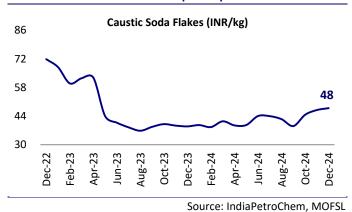
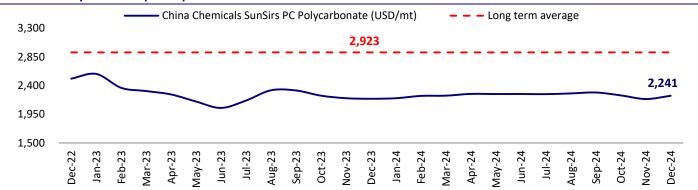


Exhibit 18: Polycarbonate price up 2% YoY



Source: Bloomberg, MOFSL

Exhibit 19: Peer comparison for our coverage universe

	_	TP	EPS (INR)		R)	P/E (x)		P/BV (x)		EV/EBITDA (x)		ROE (%)					
Company	Reco	(INR)	FY25E	FY26E	FY27E	FY25E	FY26E	FY27E	FY25E	FY26E	FY27E	FY25E	FY26E	FY27E	FY25E	FY26E	FY27E
Alkyl Amines	Neutral	1,760	32.0	46.9	62.5	56.5	38.5	28.9	6.7	6.0	5.3	33.9	24.4	18.6	12.4	16.5	19.5
Atul	Buy	8,395	153.2	202.1	252.4	45.1	34.2	27.4	3.7	3.4	3.1	23.7	19.6	16.3	8.5	10.4	11.8
Clean Science	Neutral	1,515	23.7	36.0	45.6	64.9	42.8	33.8	11.5	9.3	7.5	44.5	32.1	25.2	19.2	24.1	24.7
Deepak Nitrite	Neutral	2,555	61.5	78.0	87.5	40.6	32.0	28.5	6.2	5.3	4.5	26.8	20.9	18.5	16.2	17.7	17.1
Fine Organic Industries	Sell	3,630	145.3	121.8	120.8	31.5	37.6	37.9	6.2	5.4	4.8	23.0	27.6	27.1	21.6	15.3	13.3
Galaxy Surfactants	Buy	3,350	95.6	118.3	139.3	26.3	21.2	18.0	3.7	3.2	2.9	16.6	13.5	11.4	14.7	16.2	16.9
Navin Fluorine International	Neutral	3,435	57.7	82.3	103.4	56.7	39.8	31.7	6.3	5.6	5.0	33.9	25.5	20.8	11.5	14.9	16.7
NOCIL	Neutral	235	7.8	8.7	12.9	32.3	29.1	19.6	2.4	2.3	2.1	25.1	20.0	13.5	7.5	8.0	11.2
PI Industries	Buy	4,650	114.4	126.5	144.8	32.3	29.2	25.5	5.5	4.7	4.0	23.4	20.0	17.1	18.3	17.2	16.9
SRF	Neutral	2,340	39.6	66.5	87.9	55.9	33.3	25.2	5.4	4.8	4.2	26.8	19.3	15.5	10.0	15.3	17.8
Tata Chemicals	Neutral	1,100	28.0	49.6	62.2	37.1	20.9	16.7	1.2	1.1	1.1	13.2	9.4	8.0	3.2	5.5	6.6
Vinati Organics	Buy	2,655	42.3	51.9	61.3	42.6	34.7	29.4	6.7	5.8	5.0	31.8	25.4	21.4	16.7	17.9	18.3

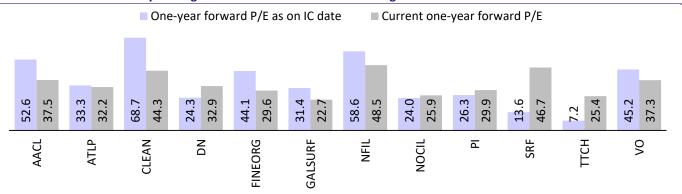
Source: Company, MOFSL

Exhibit 20: The sector is trading at a premium to historical averages

	Current		Average P/E (x)		P	Prem / Disc P/E (%	5)
Companies	P/E (x)	15 YR	10 YR	5 YR	15 YR	10 YR	5 YR
Chemicals	32.5	19.1	24.6	33	70.2	32.1	-1.5
Alkyl Amines	36.8	25.3	34.9	57.7	45.5	5.4	-36.2
Atul	32	22.2	30.2	42.5	44.1	6.0	-24.7
Clean Science	42.9	NA	62.1	62.1	NA	-30.9	-30.9
Deepak Nitrite	33.8	18.1	22.2	28.6	86.7	52.3	18.2
Fine Organic	36.4	33.1	33.1	35	10.0	10.0	4.0
Galaxy Surfactants	22.4	25.7	25.7	27.6	-12.8	-12.8	-18.8
Navin Fluorine	42.7	25.6	36	57.4	66.8	18.6	-25.6
NOCIL	28.8	15.9	19.1	25.5	81.1	50.8	12.9
P I Inds.	29.2	25.9	32.3	34.9	12.7	-9.6	-16.3
SRF	36.9	19.7	26.6	35.8	87.3	38.7	3.1
Tata Chemicals	23.7	10.7	13.9	20.2	121.5	70.5	17.3
Vinati Organics	36.6	27.1	34.9	46.7	35.1	4.9	-21.6

Source: Company, MOFSL

Exhibit 21: The sector is today trading at a discount to what it was trading as on our sector IC date



Source: Bloomberg, MOFSL

# VO - Financial summary and assumptions (TP: INR2,655) - BUY

Exhibit 22: : Expect 21% revenue CAGR over FY24-27

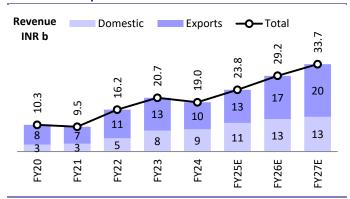
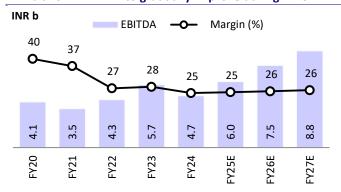


Exhibit 23: EBITDAM to gradually improve during FY25-27



Source: Company, MOFSL

Source: Company, MOFSL

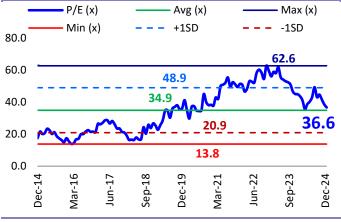
**Exhibit 24: Financial summary** 

(INR b)
---------

	, a,							(
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Sales	10.3	9.5	16.2	20.7	19.0	23.8	29.2	33.7
EBITDA	4.1	3.5	4.3	5.7	4.7	6.0	7.5	8.8
PAT	3.3	2.7	3.5	4.2	3.2	4.4	5.4	6.4
EPS (INR)	32.2	26.0	33.4	40.4	31.2	42.3	51.9	61.3
EPS Gr. (%)	18.2	(19.3)	28.7	20.9	-22.8	35.7	22.6	18.0
BV/Sh.(INR)	123.4	148.9	176.3	213.5	237.7	270.6	310.8	358.4
Ratios								
Net D:E	(0.0)	(0.0)	0.0	0.0	-0.0	0.1	0.1	0.0
RoE (%)	28.6	19.1	20.6	20.7	13.8	16.7	17.9	18.3
RoCE (%)	26.9	18.1	19.5	19.6	13.1	14.8	15.4	16.7
Payout (%)	31.6	23.1	19.4	17.3	22.4	22.4	22.4	22.4
Valuations								
P/E (x)	53.4	66.2	51.4	42.5	55.1	40.6	33.1	28.1
P/BV (x)	13.9	11.6	9.8	8.1	7.2	6.4	5.5	4.8
EV/EBITDA (x)	42.9	50.6	41.1	31.3	37.9	30.3	24.2	20.4
Div. Yield (%)	0.3	0.3	0.4	0.4	0.4	0.6	0.7	0.8
FCF Yield (%)	0.6	1.0	(0.2)	1.2	0.6	-0.9	1.6	2.3

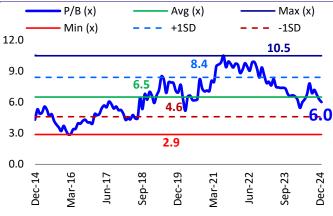
Source: Company, MOFSL

Exhibit 25: One year forward P/E trades at 36.6x



Source: Company, MOFSL

Exhibit 26: One year forward P/B trades at 6x



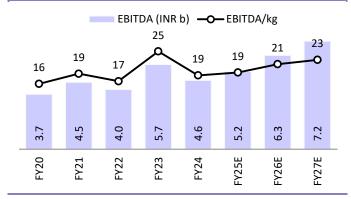
Source: Company, MOFSL

9 January 2025

# GALSURF - Financial summary and assumptions (TP: INR3,350) - BUY

Exhibit 27: Specialty care share to increase going forward

Exhibit 28: EBITDA/kg set to expand in FY25-27



Source: Company, MOFSL Source: Company, MOFSL

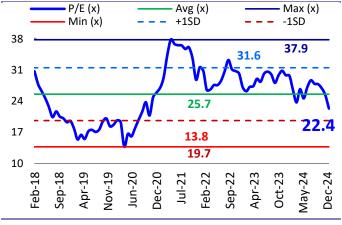
**Exhibit 29: Financial summary** 

71	NI	D	h	١
v	IV	n	v	,

EXIIIDIL 23. FIIIAIICIAI S	ullillary							(IIVIN D)
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Sales	26.0	27.8	36.9	44.6	37.9	41.6	47.6	54.7
EBITDA	3.7	4.5	4.0	5.7	4.6	5.2	6.3	7.2
PAT	2.3	3.0	2.6	3.8	3.0	3.4	4.2	4.9
EPS (INR)	65.0	85.2	74.1	107.5	85.0	95.6	118.3	139.3
EPS Gr. (%)	20.6	31.1	(13.0)	45.0	-20.9	12.4	23.7	17.8
BV/Sh.(INR)	301.2	367.1	444.1	531.0	614.7	685.6	773.3	876.5
Ratios								
Net D:E	0.2	0.1	0.2	0.0	-0.0	-0.1	-0.1	-0.2
RoE (%)	23.7	25.5	18.3	22.0	14.8	14.7	16.2	16.9
RoCE (%)	19.1	21.1	15.5	19.2	14.1	14.4	16.0	16.8
Payout (%)	31.5	21.1	24.3	20.5	25.9	25.9	25.9	25.9
Valuations								
P/E (x)	38.3	29.2	33.6	23.2	29.3	26.1	21.1	17.9
P/BV (x)	8.3	6.8	5.6	4.7	4.1	3.6	3.2	2.8
EV/EBITDA (x)	24.7	20.0	22.8	15.6	18.9	16.5	13.4	11.4
Div. Yield (%)	0.7	0.7	0.7	0.9	0.9	1.0	1.2	1.4
FCF Yield (%)	2.0	2.9	(1.7)	4.9	4.1	2.8	3.2	3.8
· · · · · · · · · · · · · · · · · · ·								

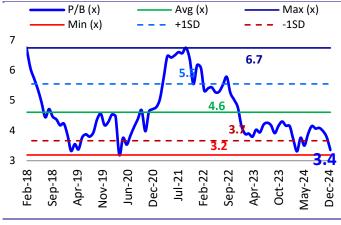
Source: Company, MOFSL

Exhibit 30: One year forward P/E trades at 22.4x



Source: Company, MOFSL

Exhibit 31: One year forward P/B trades at 3.4x



Source: Company, MOFSL

Investment in securities market are subject to market risks. Read all the related documents carefully before investing

9

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. 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://onlinere

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 Prochttps://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx Enquiry Proceedings Motilal Oswal Financial Services Limited available of are

A graph of daily closing prices of securities is available at www.nseindia.com, 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") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to grievances@motilaloswal.com.

Nainesh Rajani Email: nainesh.rajani@motilaloswal.com

Contact: (+65) 8328 0276

### Specific Disclosures

- 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
- MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months 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
- Research Analyst has not served as director/officer/employee in the subject company
- MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- MOFSL has not received compensation for investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months 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
- 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.

9 January 2025

- 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.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; 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, Contact No: 022-40548085.

Grievance Redressal Cell:

Contact No.	Email ID
022 40548000 / 022 67490600	query@motilaloswal.com
022 40548082	servicehead@motilaloswal.com
022 40548083	am@motilaloswal.com
	022 40548000 / 022 67490600 022 40548082

Registration details of group entities.: Motifal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN :: 146822. IRDA Corporate Agent – CA0579. Motifal 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. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.