

# Specialty Chemicals

India

Sector View: **Neutral**

NIFTY-50: **21,738**

January 29, 2024

## Crop & Chemical Dashboard: Agricultural cycle weakening

International prices of major crops—corn, wheat and soybeans—are under pressure amid signs of ample supply; this is an added worry for the world agrochemicals industry, which has already been struggling with destocking. In the chemical markets, a demand recovery in key regions may not be strongly felt until 2HCY24, and meanwhile, overcapacity in China remains a concern even as Red Sea supply disruptions further add to uncertainty.

### Continue to expect only a slow and subdued recovery in chemical demand

India's exports of organic and inorganic chemicals increased 23.9% mom but declined 1% yoy in December 2023, while imports dropped 0.1%/15.6% mom/yoy. US chemical production for November 2023 rose 0.7%/9.2% mom/yoy, albeit off a weak base for December 2022, while chemical railcar holdings—a measure of volumes—increased 2.7% yoy on a 13-week moving average basis for the week ending January 13. US data indicates continued softness in pricing, with chemicals producer prices down 5.3% yoy and import prices down 0.2%/10.8% mom/yoy. Dow Chemicals, in its recent quarterly earnings report, suggested that inventory levels are low throughout the chemical supply chain, but said that a meaningful pickup in restocking will happen only once interest rates start to come down in the US or energy costs start to move up.

### Agricultural crop price cycle has weakened

International futures prices of the three most important crops—corn, soybeans and wheat—are now down 20-35% yoy after having softened another 4-7% sequentially during the past month. The weakness is due to rising supplies in the world market amid weak demand in general, although India's biofuels mandate for corn has lent some support to local prices. If farmer demand for agrochemicals weakens amid falling crop prices, the beginning of restocking may be further delayed. Meanwhile, climate remains a concern, with below-normal reservoir levels in southern India a worry, as is low snowfall in the Himalayan regions, which is feared to potentially impact groundwater levels ahead of Kharif sowing. In the fertilizer markets, prices of rock phosphate and ammonia softened. Broiler chicken prices have fallen on higher output.

### Chemical price trends

Chemical prices generally remain soft, with little signs yet of any meaningful move upward. Soda ash spot prices in China have corrected in recent weeks after a short-lived spike, while soda ash import prices into India, too, remain weak. International phenol spreads have softened in recent weeks. Prices of Atul's key product categories, including 2,4-D herbicide, p-cresol, epoxy resins and sulfur black remain weak, although there is a slight uptick in some cases off a depressed base. In the refrigerant category, prices of R-22 and R-32 have corrected in January 2024. Prices of ATBS (Vinati Organics) also eased slightly in January 2024, while prices of MEHQ (Clean Science) ticked up during the month. It remains to be seen whether Red Sea supply disruptions lead to any sustained upward pressure on chemical prices or disrupt volumes.

### Company data and valuation summary

Ticker	CMP(Rs)	FV (Rs)	Rating	Upside (%)
ARTO IN	642	540	SELL	(16)
ATLP IN	6,279	4,050	SELL	(36)
CLEAN IN	1,426	1,480	ADD	4
DN IN	2,240	2,120	REDUCE	(5)
NFIL IN	3,324	3,620	ADD	9
SRF IN	2,247	2,630	BUY	17
TTCH IN	1,013	790	SELL	(22)
VO IN	1,710	1,510	SELL	(12)
BYRCS IN	5,868	5,080	REDUCE	(13)
GOAGRO IN	531	530	ADD	(0)
PI IN	3,293	3,630	ADD	10
RALI IN	265	220	SELL	(17)
UPLL IN	540	550	REDUCE	2

Ticker	P/E(x)		EV/EBITDA(x)	
	2024E	2025E	2024E	2025E
ARTO IN	60.4	40.3	26.6	21.0
ATLP IN	47.0	37.7	25.5	20.9
CLEAN IN	78.5	44.9	56.1	32.7
DN IN	37.5	32.5	25.3	22.9
NFIL IN	47.9	33.7	29.7	20.8
SRF IN	44.6	30.8	23.9	17.8
TTCH IN	19.3	25.9	7.5	8.6
VO IN	47.3	35.1	34.5	24.7
BYRCS IN	31.2	28.0	21.6	19.4
GOAGRO IN	31.6	23.5	18.3	14.1
PI IN	31.9	29.9	24.7	21.5
RALI IN	32.0	25.2	16.5	13.8
UPLL IN	19.7	13.5	6.6	5.6

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of January 29, 2024

### Quick Numbers

India's exports of organic and inorganic chemicals increased 23.9% mom but declined 1% yoy

Imports declined 0.1%/15.6% mom/yoy

### Related Research

- Specialty Chemicals: Crop & Chemical
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## Agriculture dashboard

### International futures prices of corn, soybean and wheat are all down sharply yoy

Exhibit 1: International crop futures prices

	Unit	28-Jan-24	29-Dec-23	28-Jan-23	mom	yoy
<b>US crop futures prices</b>						
Coffee	(US\$/lb)	1.9	1.9	1.7	2.9%	14.1%
Cotton	(US\$/lb)	0.8	0.8	0.8	3.0%	-1.5%
Corn	(US\$/bushel)	4.5	4.7	6.8	-5.3%	-34.7%
Rice	(US\$/cwt)	18.0	17.3	18.3	3.9%	-1.8%
Soybean	(US\$/bushel)	12.1	12.9	15.1	-6.5%	-19.9%
Sugar	(USc/lb)	22.5	20.5	16.8	9.6%	33.7%
Wheat	(US\$/bushel)	6.0	6.3	7.9	-4.4%	-23.8%
<b>Brazil crop futures prices</b>						
Corn	US\$/60 kg-bag	17.4	17.3	17.4	0.9%	0.2%
Soybean	US\$/60 kg-bag	24.2	29.3	33.4	-17.5%	-27.5%
<b>Europe futures prices</b>						
Wheat	US\$/ ton	246.9	261.4	282.5	-5.5%	-12.6%
<b>Malaysia futures prices</b>						
Palm oil	US\$/ ton	842.2	802.7	904.7	4.9%	-6.9%

Note: 1 bushel of corn = 25.401 kg, 1 bushel of wheat or soybean = 27.216 kg, 1cwt = 45.359 kg

Source: Bloomberg, Kotak Institutional Equities

### In India, prices of oilseeds (groundnut and soybeans) fell, as did onions

Exhibit 2: Spot prices of crop commodities in India

	27-Jan-24	27-Dec-23	17-Jan-23	mom	yoy
<b>Crop prices (Rs/quintal)</b>					
Paddy	2,353	2,411	2,039	-2.4%	15.4%
Wheat	2,553	2,488	2,748	2.6%	-7.1%
Maize	2,145	2,119	2,163	1.2%	-0.8%
Soybean	4,333	4,574	5,223	-5.3%	-17.1%
Cotton	6,572	6,574	8,101	0.0%	-18.9%
Ground nut	6,037	6,758	6,116	-10.7%	-1.3%
Rubber (natural)	15,183	14,483	13,750	4.8%	10.4%
<b>Vegetable prices (Rs/quintal)</b>					
Cabbage	1,587	1,513	1,113	4.9%	42.6%
Cauliflower	1,860	1,903	1,516	-2.3%	22.7%
Onion	2,080	2,543	1,580	-18.2%	31.6%
Potato	1,146	1,248	1,401	-8.2%	-18.2%
Tomato	2,067	1,897	1,411	9.0%	46.5%

Source: Agmarknet, Kotak Institutional Equities

## Global stock-to-use ratios increased for corn and cotton

Exhibit 3: USDA world agriculture demand and supply estimates

Crop	Unit	2020-21	2021-22	2022-23 Estimate	Dec-23	Jan-24
					2023-24 Projection	2023-24 Projection
<b>Corn - world</b>	<b>mn MT</b>					
Production		1,129.4	1,215.9	1,155.6	1,222.1	1,235.7
Consumption		1,144.0	1,198.3	1,165.6	1,207.0	1,211.1
Closing stocks		292.8	310.5	300.6	315.2	325.2
<b>Stock-to-use</b>		<b>25.6%</b>	<b>25.9%</b>	<b>25.8%</b>	<b>26.1%</b>	<b>26.9%</b>
<b>Corn - world less China</b>	<b>mn MT</b>					
Production		868.8	943.4	878.4	945.1	946.9
Consumption		859.0	907.3	866.6	903.0	905.1
Closing stocks		87.1	101.4	94.5	113.2	113.4
<b>Stock-to-use</b>		<b>10.1%</b>	<b>11.2%</b>	<b>10.9%</b>	<b>12.5%</b>	<b>12.5%</b>
<b>Cotton - world</b>	<b>mn 480-pound bales</b>					
Production		111.5	114.5	116.6	112.9	113.2
Consumption		123.3	116.1	111.2	113.7	112.5
Closing stocks		86.3	76.4	83.2	82.4	84.4
<b>Stock-to-use</b>		<b>70.0%</b>	<b>65.8%</b>	<b>74.9%</b>	<b>72.5%</b>	<b>75.0%</b>
<b>Rice - world</b>	<b>mn MT</b>					
Production		509.3	513.1	513.0	518.1	518.1
Consumption		503.7	517.8	520.4	525.1	525.1
Closing stocks		187.3	183.3	175.8	167.8	167.8
<b>Stock-to-use</b>		<b>37.2%</b>	<b>35.4%</b>	<b>33.8%</b>	<b>32.0%</b>	<b>32.0%</b>
<b>Soybean - world</b>	<b>mn MT</b>					
Production		368.6	360.4	374.4	398.9	398.9
Consumption		364.0	364.0	363.7	384.0	384.0
Closing stocks		100.4	98.0	101.9	114.2	114.2
<b>Stock-to-use</b>		<b>27.6%</b>	<b>26.9%</b>	<b>28.0%</b>	<b>29.7%</b>	<b>29.7%</b>
<b>Wheat - world</b>	<b>mn MT</b>					
Production		774.4	780.1	789.7	783.0	784.9
Consumption		787.7	791.2	790.9	794.7	796.4
Closing stocks		286.3	272.3	271.6	258.2	260.0
<b>Stock-to-use</b>		<b>36.3%</b>	<b>34.4%</b>	<b>34.3%</b>	<b>32.5%</b>	<b>32.6%</b>

Source: USDA, Kotak Institutional Equities

**For India, the USDA has cut estimated inventories of wheat, whereas cotton and rice stock estimates were revised higher**

**Exhibit 4: USDA India agriculture demand and supply estimates**

Crop	Unit	2020-21	2021-22	2022-23 Estimates	Dec-23	Jan-24
					2023-24 Projection	2023-24 Projection
<b>Cotton</b>						
	mn 480-pound bales					
Production		27.6	24.3	26.3	25.0	25.0
Consumption		26.0	25.0	23.5	24.0	23.7
Closing stocks		11.9	8.4	11.8	12.3	12.8
<b>Stock-to-use</b>		<b>45.9%</b>	<b>33.6%</b>	<b>50.3%</b>	<b>51.3%</b>	<b>54.1%</b>
<b>Rice</b>						
	mn MT					
Production		124.4	129.5	135.8	132.0	132.0
Consumption		101.1	110.5	114.5	118.0	118.0
Closing stocks		37.0	34.0	35.0	32.5	33.0
<b>Stock-to-use</b>		<b>36.6%</b>	<b>30.8%</b>	<b>30.6%</b>	<b>27.5%</b>	<b>28.0%</b>
<b>Wheat</b>						
	mn MT					
Production		107.9	109.6	104.0	110.6	110.6
Consumption		102.2	109.9	108.7	108.7	109.9
Closing stocks		27.8	19.5	9.5	11.0	10.0
<b>Stock-to-use</b>		<b>27.2%</b>	<b>17.7%</b>	<b>8.7%</b>	<b>10.1%</b>	<b>9.1%</b>

Source: USDA, Kotak Institutional Equities

**World stock-to-use ratios: Note the sharp rise projected in 2024P for corn (ex-China) and soybeans**

**Exhibit 5: World stock-to-use ratios in key crops**

	2015	2016	2017	2018	2019	2020	2021	2022	2023E	2024P
Corn	21%	22%	32%	31%	28%	27%	26%	26%	26%	27%
non-China	14%	14%	15%	14%	13%	12%	10%	11%	11%	13%
Cotton	100%	85%	69%	66%	67%	94%	70%	66%	75%	75%
Rice	24%	28%	31%	34%	37%	37%	37%	35%	34%	32%
Soybean	26%	25%	29%	29%	33%	27%	28%	27%	28%	30%
Wheat	31%	34%	35%	38%	39%	40%	36%	34%	34%	33%

Source: USDA, Kotak Institutional Equities

**Climate remains a key worry for 2024, with El Nino likely to lead to headwinds for farmers**

**Exhibit 6: Weather check**

India	Lack of snowfall in the Himalayan region could deplete groundwater levels ahead of Kharif sowing. Horticulture (e.g., apple) output is already believed to have been impacted.
Europe	Cold and snowy weather in the north transitioned to warm and wet conditions over much of southern Europe.
Latin America	Heavy rain fell in high-yielding corn and soybean areas in Argentina. Showers overspread most major agricultural areas, but above-normal temperatures hastened maturation of soybeans and other crops while maintaining high evaporative losses in Brazil.
Australia	Wet weather persisted in the east, favoring summer crop development.
Asia	Beneficial rainfall continued in Indonesia and Malaysia, although seasonal moisture deficits remained a concern.

Source: USDA, Kotak Institutional Equities

**Prices of rock phosphate have corrected sharply, while ammonia prices have also softened**

**Exhibit 7: Fertilizer prices (US\$/MT)**

Prices in USD/ton	Average monthly prices			Price as of	% change	
	Dec-23	Nov-23	Dec-22	26-Jan-24	mom	yoy
<b>International prices</b>						
Ammonia (US)	600	625	1030	445	-4.0%	-41.7%
DAP (US)	578	591	775	598	-2.2%	-25.4%
Phosphoric acid (China)	1045	1048	1168	NA	-0.3%	-10.5%
Potassium Chloride (US)	312	332	514	NA	-6.0%	-39.3%
Rock phosphate (Global index)	153	348	300	NA	-56.1%	-49.2%
Urea (US)	307	333	466	341	-7.9%	-34.1%
<b>India prices</b>						
Ammonia	535	570	856	350	-6.1%	-37.5%
Phosphoric acid	985	985	1150	985	0.0%	-14.3%
Urea	402	402	576	323	0.0%	-30.2%

Source: Bloomberg, Kotak Institutional Equities

**Sales of all fertilizers except MOP are up YTD in India**

**Exhibit 8: Production, sales and imports of fertilizers (mn MT)**

(mn MT)	Nov-23			% yoy			YTD 2024			% yoy		
	Production	Sales	Import	Production	Sales	Import	Production	Sales	Import	Production	Sales	Import
Urea	2.77	3.21	0.97	16%	-19%	-16%	20.88	23.97	4.77	12%	3%	3%
DAP	0.35	1.29	0.68	-8%	-30%	41%	3.05	9.05	4.60	11%	9%	-13%
Ammonium Sulphate	0.06	NA	NA	-8%	NA	NA	0.41	NA	NA	-18%	NA	NA
Complex fertilizers	0.81	1.18	0.28	-3%	-10%	14%	6.45	8.58	1.67	20%	32%	-14%
Single super phosphate	0.34	NA	NA	-36%	NA	NA	3.30	NA	NA	-15%	NA	NA
MOP	NA	0.18	0.21	NA	-27%	109%	NA	1.11	1.76	NA	-1%	51%

Source: Department of Fertilizers, Kotak Institutional Equities

**Subsidy disbursement picked up sequentially for P&K fertilizers in November 2023**

**Exhibit 9: Fertilizer subsidy disbursement (Rs bn)**

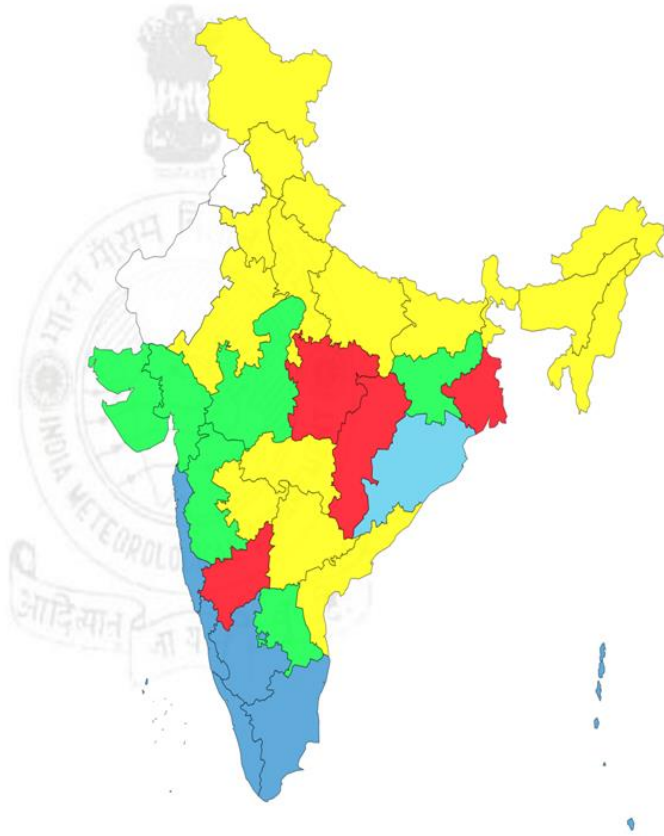
	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	YTD 2024
<b>Fertilizer monthly subsidy disbursement (Rs bn)</b>									
Urea	69	93	141	185	156	63	92	73	870
P&K	94	1	66	85	95	81	11	57	490
<b>Total</b>	<b>162</b>	<b>94</b>	<b>206</b>	<b>270</b>	<b>251</b>	<b>144</b>	<b>103</b>	<b>130</b>	<b>1,360</b>
<b>Growth (yoy, %)</b>									
Urea	39	67	(3)	100	14	(15)	32	(80)	(12)
P&K	1,387	(18)	5,301	(20)	364	(39)	(92)	(56)	(10)
<b>Total</b>	<b>191</b>	<b>65</b>	<b>42</b>	<b>35</b>	<b>60</b>	<b>(31)</b>	<b>(52)</b>	<b>(74)</b>	<b>(11)</b>

Source: Department of Fertilizers, Kotak Institutional Equities

**Exhibit 10: Sub-divisional rainfall map of India in January 2024**

Daily (29-01-2024)  
  Weekly (29-01-2024)  
  Monthly (01-12-2023 To 31-12-2023 )  
 Cumulative (01-01-2024 To 29-01-2024 )

No Data  
  No Rain  
  Unlisted  
  Large Deficient [-99% to -60%]  
  Deficient [-59% to -20%]  
 Normal [-19% to 19%]  
  Excess [20% to 59%]  
  Large Excess [60% or more]



Source: IMD, Kotak Institutional Equities

**Deficit rainfall has depleted water reservoir levels in South India: a worry for the Rabi season**

**Exhibit 11: Region-wise water reservoir levels (bn cubic meter) as of January 25, 2023**

Regions	Current storage	Last year's storage	10 years average storage
Northern	9.6	11.1	9.6
Eastern	13.0	12.2	12.9
Western	24.3	27.8	22.0
Central	29.4	32.3	28.8
Southern	19.0	33.4	27.1

Source: Central Water Commission, Kotak Institutional Equities

**Livestock market watch: Broiler prices have corrected**

**Exhibit 12: Prices of broiler (Rs/kg), egg (Rs/100 eggs) and layer (Rs/kg)**

	Unit	Dec-23	Nov-23	Dec-22	mom	yoy
Average broiler prices	(Rs/kg)	87	90	116	-3%	-25%
Average egg prices	(Rs/100 eggs)	588	552	549	7%	7%
Average layer prices	(Rs/kg)	NA	69	69	NA	NA

Source: Poultry Bazaar

**9(3) agrochemical registration watch**

**Exhibit 13: Registration committee decisions on registration of new formulations/technical in 453rd meeting (held on Jan 16, 2024)**

Company	Product	Comments
M/s Seedling India	Dimethomorph 12% + Pyraclostrobin 6.7%	Registration rejected for indigenous manufacture of Dimethomorph 12% + Pyraclostrobin 6.7% WG under section 9(3) FIM vs FIT
M/s Seedling India	Trifloxystrobin 6% + Thiamethoxam 24% + Thiophanate methyl 9.5% FS	Registration granted and approved for indigenous manufacture of Trifloxystrobin 6% + Thiamethoxam 24% + Thiophanate methyl 9.5% FS under section 9(3) FIM
M/s Gharda Chemicals	Fipronil 15% + Chlorantraniliprole 5% SC	Registration granted and approved for indigenous manufacture of Fipronil 15% + Chlorantraniliprole 5% SC under section 9(3) FIM
M/s GSP Crop Science	Pymetrozine 30% + Tebuconazole 37% WG	Registration granted and approved for indigenous manufacture of Pymetrozine 30% + Tebuconazole 37% WG under section 9(3) FIM
M/s Dhanuka Agritech	Fomesafen 12.5% + Quizalofop ethyl 4.68% EC	Registration granted and approved for indigenous manufacture of Fomesafen 12.5% + Quizalofop ethyl 4.68% EC under section 9(3) FIM
M/s UPL	Cartap hydrochloride 7.5% + Chlorantraniliprole 0.4% GR	Registration granted and approved for indigenous manufacture of Cartap hydrochloride 7.5% + Chlorantraniliprole 0.4% GR under section 9(3) FIM
M/s Syngenta India	cyantraniliprole 10% + Pymetrozine 50% WG	Registration granted and approved for indigenous manufacture of cyantraniliprole 10% + Pymetrozine 50% WG under section 9(3) FIM
M/s Willowood Chemicals	Fenoxaprop p ethyl 5% + Chlorimuron ethyl 0.6% + Pretilachlor 50% ME	Registration granted and approved for indigenous manufacture of Fenoxaprop p ethyl 5% + Chlorimuron ethyl 0.6% + Pretilachlor 50% ME under section 9(3) FIM
M/s Willowood Chemicals	Paraquat dichloride 7.50% + Glyphosate 30% SC	Registration granted and approved for indigenous manufacture of Paraquat dichloride 7.50% + Glyphosate 30% SC under section 9(3) FIM
M/s Gharda Chemicals	Fipronil 15% + Deltamethrin 2.5% SC	Registration granted and approved for indigenous manufacture of Fipronil 15% + Deltamethrin 2.5% SC under section 9(3) FIM
M/s ADAMA India	Fomesafen 16.8% + Propaquizafop 5.2% ME	Registration granted and approved for technical import of Fomesafen 16.8% + Propaquizafop 5.2% ME under section 9(3) FI.
M/s Cheminova India	Beflubutamid technical 98.50% w/w min.	Registration has to be resubmitted in the next RC meeting with corrections as requested by the applicant.
M/s Willowood Chemicals	Mepiquat dichloride technical 98% w/w min	Registration rejected for import of Mepiquat dichloride technical 98% w/w min. under section 9(3) TI.
M/s Tropical Agrosystem India	Paraquat dichloride technical 45% w/w min	Registration deliberated for agenda and decided that clarification for change of address may be sought from the applicant for Paraquat dichloride technical 45% w/w min under section 9(3) TI.
M/s ATGC Biotech	SCLP BFSB (E11 HAD and E11 HDL)	Registration granted and approved for indigenous manufacture of SCLP BFSB (E11 HAD and E11 HDL). under section 9(3) TIM.
M/s Natco Pharma	Cyantraniliprole technical 93% w/w min.	Registration granted and approved for indigenous manufacture of Cyantraniliprole technical 93% w/w min. us/ 9(3) TIM vs TI.
M/s Synergia Sciences	Metofluthrin technical 96% w/w min.	Registration granted and approved for indigenous manufacture of Metofluthrin technical 96% w/w min. us/ 9(3) TIM vs TI
M/s GSP Crop Science	Methoxyfenozide technical 97% w/w min.	Registration granted and approved for indigenous manufacture of Methoxyfenozide technical 97% w/w min. us/ 9(3) FIM.
M/s GSP Crop Science	Methoxyfenozide 20% + Chlorantraniliprole 5% SC	Registration granted and approved for indigenous manufacture of Methoxyfenozide 20% + Chlorantraniliprole 5% SC us/ 9(3) FIM.
M/s Rallis India	Diclosulam 0.9% + Pendomethalin 35% SL	Registration granted and approved for indigenous manufacture of Diclosulam 0.9% + Pendomethalin 35% SL us/ 9(3) FIM
M/s ISK Biosciences India	Pyriofenone 18% w/v SC (16.51% w/w)	Registration granted and approved for technical import of Pyriofenone 18% w/v SC (16.51% w/w) us/ 9(3) FI.

Source: CIB, Kotak Institutional Equities

**Rabi acreages overall are down marginally yoy**

Exhibit 14: Total area sown under Rabi crops as on January 19, 2024 (mn hectares)

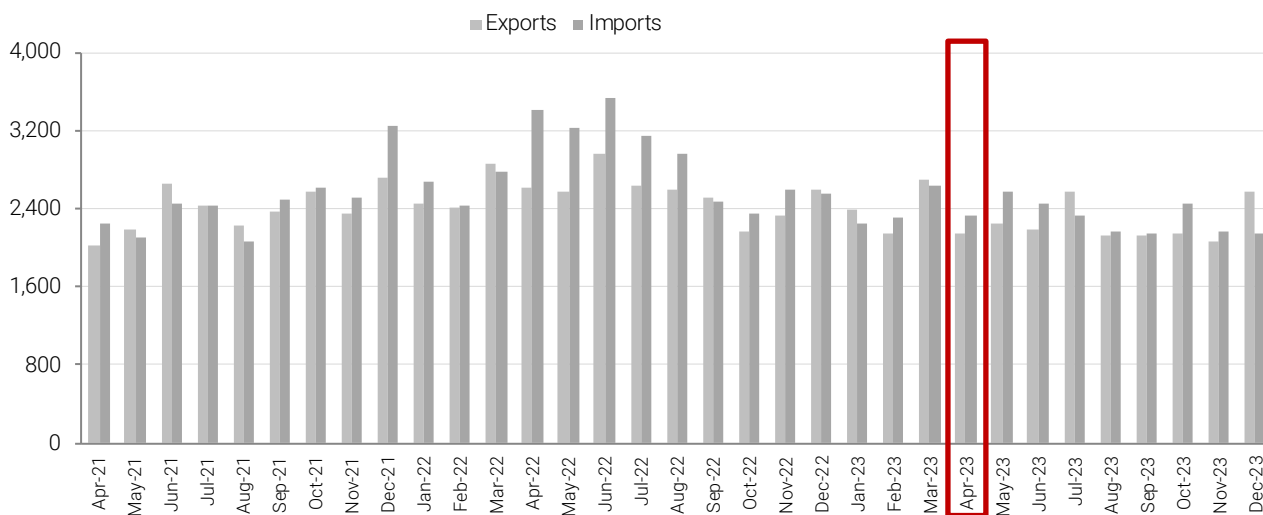
Crops (in mn ha.)	2023-24	2022-23	yoy (%)
<b>Wheat</b>	<b>34.0</b>	<b>33.8</b>	<b>0.8</b>
<b>Rice</b>	<b>2.8</b>	<b>2.9</b>	<b>(3.7)</b>
<b>Pulses</b>	<b>15.5</b>	<b>16.3</b>	<b>(4.6)</b>
Gram	10.3	11.0	(6.2)
Lentil	2.0	1.8	5.7
<b>Coarse cereals</b>	<b>5.4</b>	<b>5.1</b>	<b>6.0</b>
Jowar	2.4	2.2	6.8
Maize	2.1	2.1	3.5
Barley	0.8	0.7	9.8
<b>Oilseeds</b>	<b>11.0</b>	<b>10.9</b>	<b>1.0</b>
Mustard	10.0	9.8	2.3
Groundnut	0.5	0.5	(11.5)
<b>Total</b>	<b>68.7</b>	<b>68.9</b>	<b>(0.3)</b>

Source: Ministry of Agriculture, Kotak Institutional Equities

**Chemical dashboard**

**India's chemical exports increased 23.9% mom but declined 1% yoy, while imports dropped 0.1%/15.6% mom/yoy in December 2023**

Exhibit 15: Monthly export and import of organic and inorganic chemicals (US\$ mn)



Source: Ministry of Commerce, Kotak Institutional Equities



**US producer prices indicate continued softness; production ticked up versus a weather-affected easy base**

**Exhibit 16: Change (yoy, 3-month moving average) in chemicals production and producer prices in the US**

	December 2023 3MMA % yoy change	
	Production	Producer prices
<b>Chemicals</b>	<b>2.6</b>	<b>(5.3)</b>
Agricultural chemicals	3.1	(21.8)
Consumer products	2.5	3.7
Basic & specialty chemicals	2.6	(5.5)
<b>Basic chemicals</b>	<b>6.0</b>	<b>(7.1)</b>
Inorganic chemicals	(1.8)	(7.0)
Bulk Petrochem & Organics	8.7	(6.5)
Plastic resins	11.8	(8.7)
Synthetic rubber	(12.0)	(11.5)
Manufactured fibers	(8.5)	(2.5)
<b>Specialty chemicals</b>	<b>(6.4)</b>	<b>(0.1)</b>
Coatings	(6.2)	(1.2)
Other specialities	(4.2)	0.5
<b>Feedstocks</b>	<b>n/a</b>	<b>(28.5)</b>
<b>Capacity utilization</b>	<b>82.3%</b>	<b>n/a</b>

Source: American chemistry council, Kotak Institutional Equities

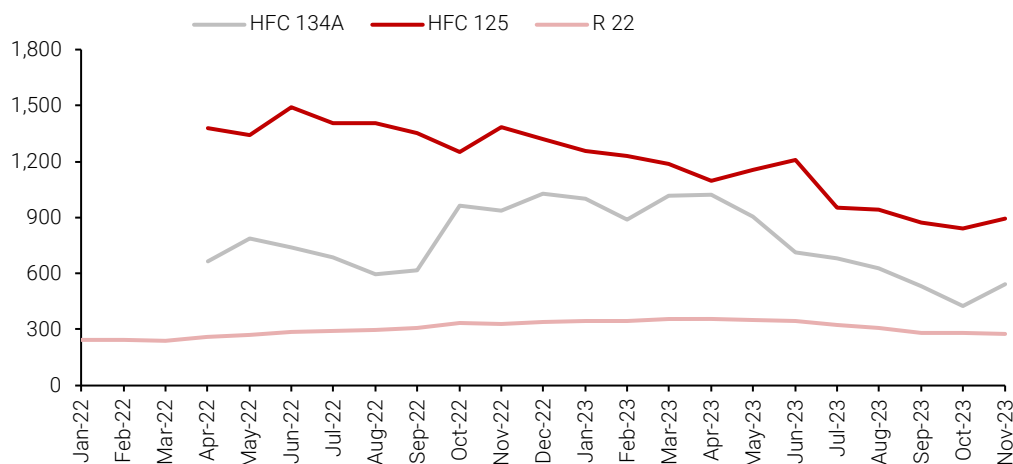
**Exhibit 17: US chemical production, exports and producer prices**

	Month	Change (%)	
		mom	yoy
Chemical production	Nov-23	0.7%	9.2%
Chemical import prices	Nov-23	-0.2%	-10.8%

Source: Company, Kotak Institutional Equities

**Export prices of refrigerants ticked up in November 2023**

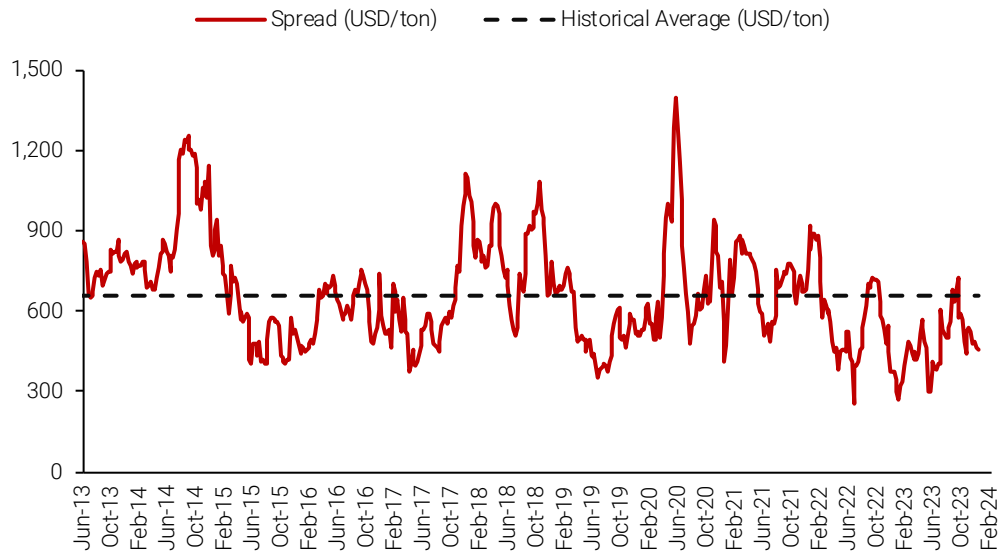
**Exhibit 18: Average export prices of refrigerants (Rs/kg)**



Source: Company, Kotak Institutional Equities

**International phenol spreads have corrected in recent weeks**

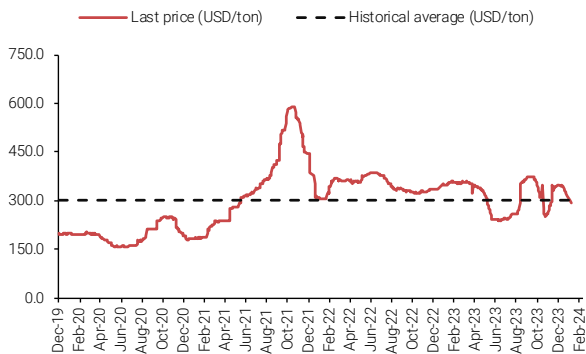
**Exhibit 19: International spreads between phenol-acetone versus benzene-propylene (US\$/ton)**



Source: Bloomberg, Kotak Institutional Equities

**China soda ash spot prices have declined in the past month**

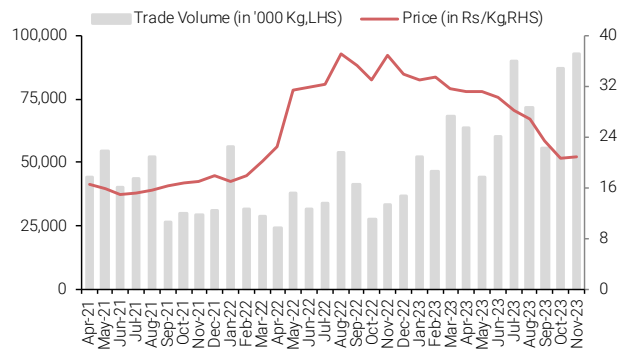
**Exhibit 20: China spot soda-ash prices**



Source: Bloomberg, Kotak Institutional Equities

**Import prices of soda ash into India remain soft**

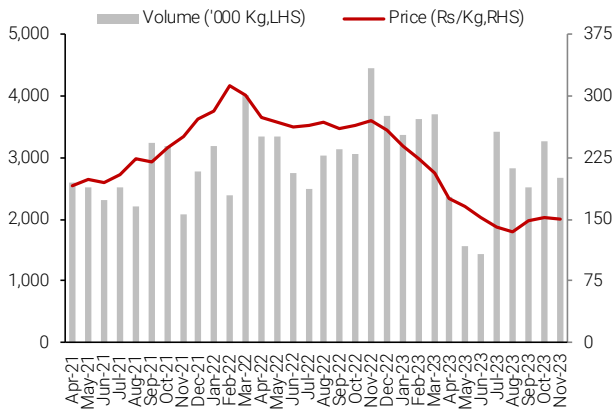
**Exhibit 21: Soda ash import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**2,4-D export price remain soft**

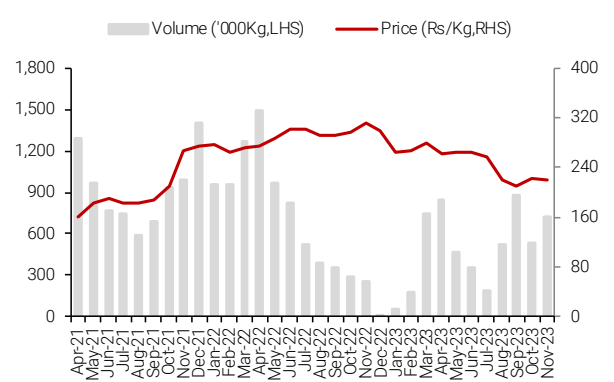
**Exhibit 22: 2,4-D export volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**P-cresol export prices remain under pressure**

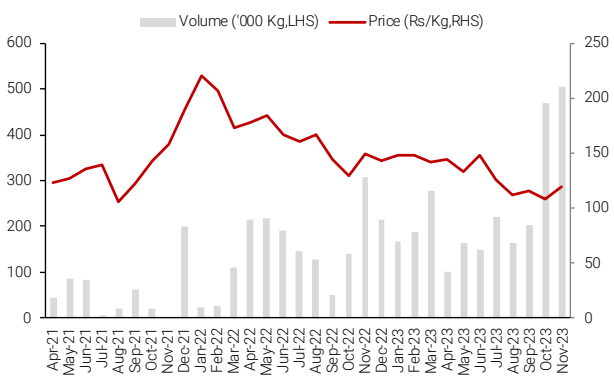
**Exhibit 23: Para-cresol export volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Sulphur black import prices ticked up slightly**

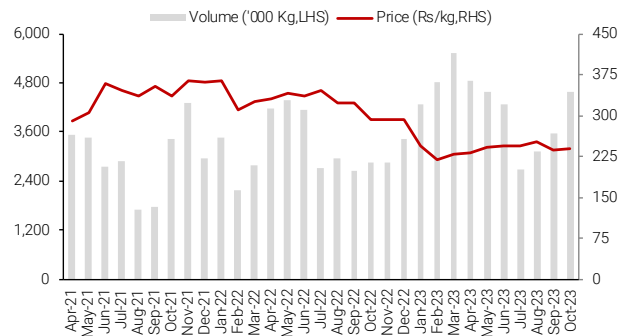
**Exhibit 24: Sulphur black import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Epoxy resin import prices remained stable**

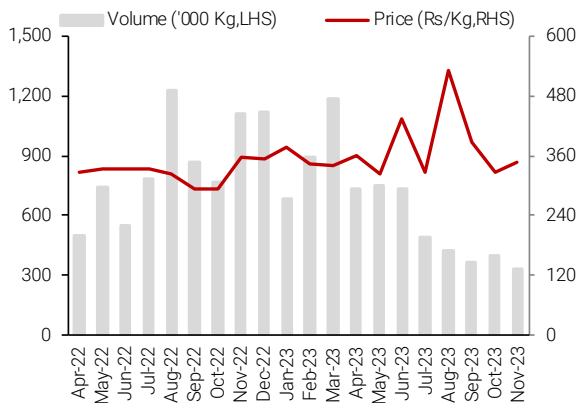
**Exhibit 25: Epoxy resin import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**R134a import prices rose slightly**

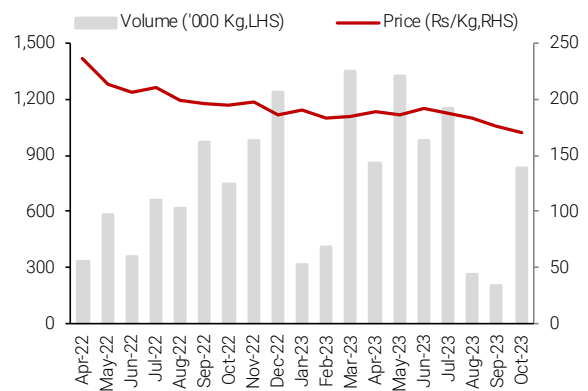
**Exhibit 26: R134a import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**R32 import prices declined amid increase in import volumes**

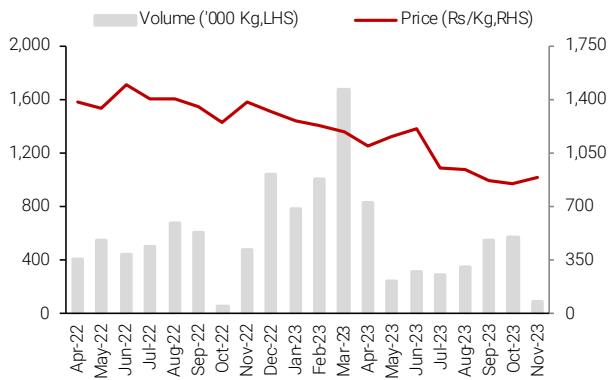
**Exhibit 27: R32 import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**R125 export prices increased amid a plunge in volumes**

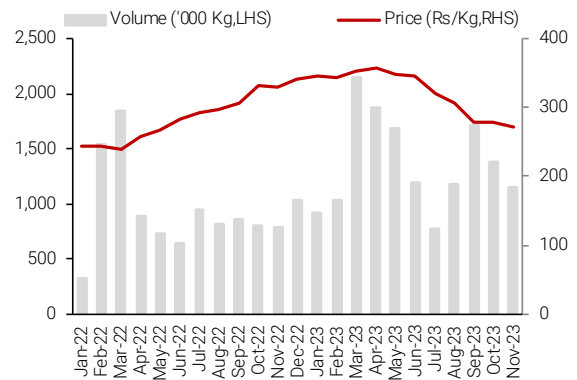
**Exhibit 28: R125 export volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**R22 export prices have been softening**

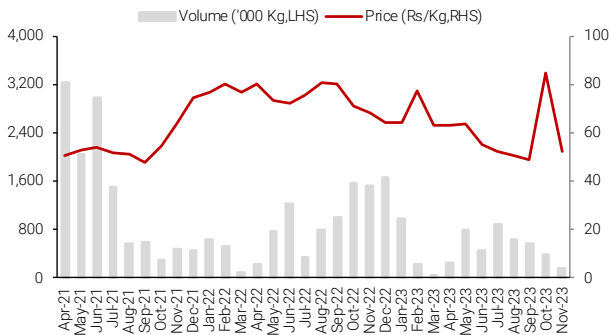
**Exhibit 29: R22 export volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Sodium nitrite import prices corrected**

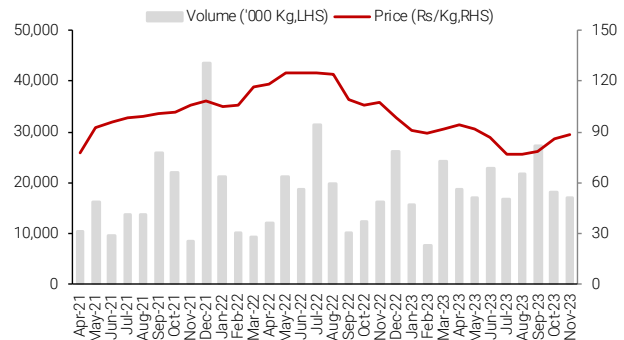
**Exhibit 30: Sodium nitrite import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Phenol import prices have increased in recent months**

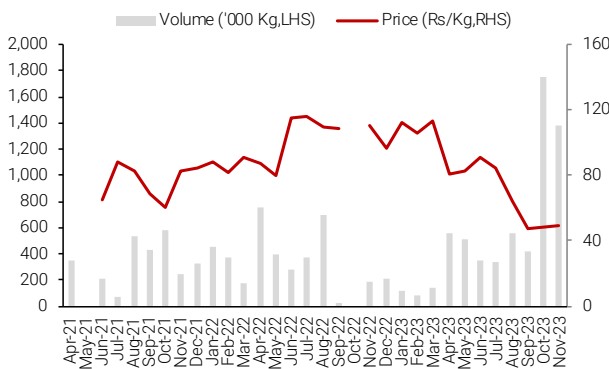
**Exhibit 31: Phenol import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**ONCB export prices stabilized after a sharp correction**

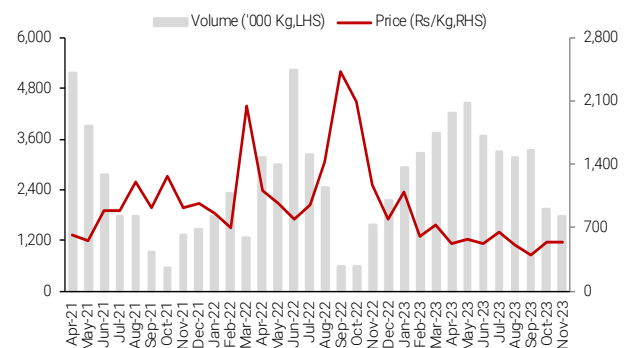
**Exhibit 32: O-Nitrochlorobenzene export volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Glyphosate import prices, too, remain near lows**

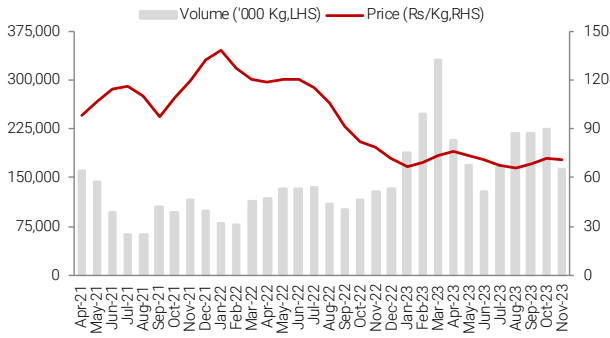
**Exhibit 33: Glyphosate import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**No recovery yet in PVC import prices**

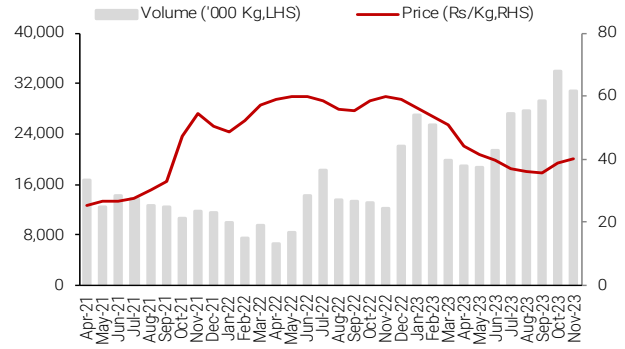
**Exhibit 34: PVC import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Caustic soda export prices have recovered slightly**

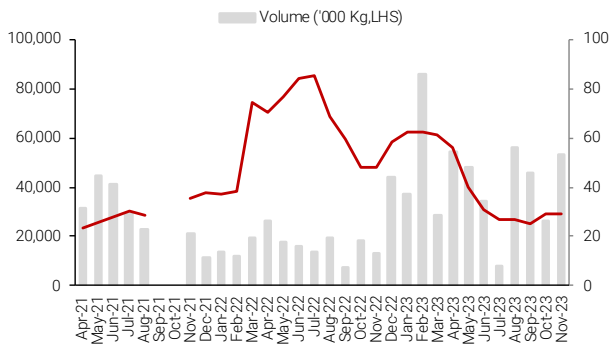
**Exhibit 35: Caustic soda export volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Ammonium nitrate import prices remain subdued**

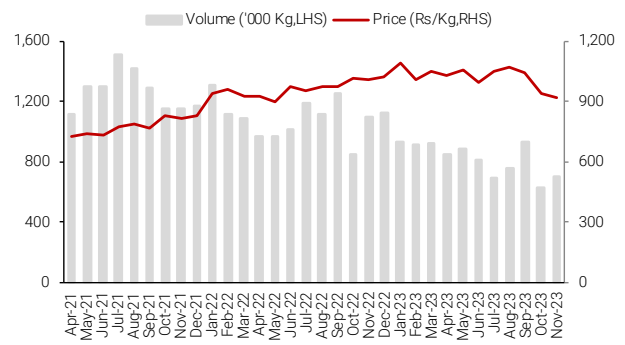
**Exhibit 36: Ammonium nitrate import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**PTFE export prices are correcting**

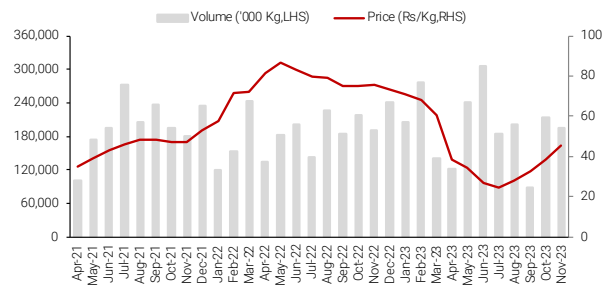
**Exhibit 37: PTFE export volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Ammonia import prices increased in recent months**

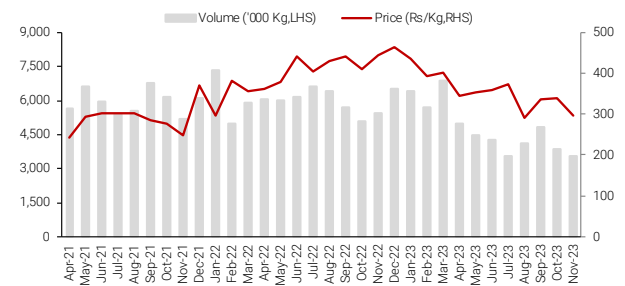
**Exhibit 38: Ammonia import volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**ATBS export prices have been weakening**

**Exhibit 39: ATBS export volumes and prices**



Source: Ministry of Commerce, Kotak Institutional Equities

**Basic chemical prices in general remained soft**

**Exhibit 40: Price trends for key basic chemicals (Rs/kg)**

Product name	Unit	Region	Latest	% change				Relevant for
			Price	1W	1M	3M	12M	
<b>Basic Chemicals</b>								
Acetic acid, local	Rs/kg	India	57	0%	8%	-21%	-2%	LXCHEM, JUBLINGR (RM)
Acetone	US\$/ton	China	1,023	-1%	-3%	-2%	-24%	DN (FG)
Acrylonitrile	US\$/ton	SE Asia	1,240	0%	0%	1%	-16%	VO (RM)
Bromine, int'l	US\$/ton	China	3,163	-3%	-9%	-4%	-50%	NEOGEN (RM)
Benzene	US\$/ton	India	955	-1%	-6%	-2%	1%	ARTO (RM)
BOPP film	Rs/kg	India	126	2%	2%	-3%	-26%	SRF (FG)
Caprolactam	US\$/ton	Taiwan, S Korea	1,660	0%	-1%	-3%	2%	CENK, SRF (RM), GSFC (FG)
Chloroform	US\$/kg	India	0.28	0%	-14%	-9%	-50%	NFIL (RM)
Ethyl acetate	US\$/ton	China	912	1%	-3%	-2%	-8%	GNFC, JUBILINGR, LXCHEM (FG)
Ethylene dichloride	US\$/kg	India	0.39	0%	19%	40%	34%	CHEMPLAS, FINOLEX, RIL (RM)
Fluorospar	US\$/ton	China	448	0%	-8%	-16%	-5%	NFIL (RM)
Isopropyl alcohol	US\$/ton	China	1,013	2%	4%	-4%	17%	DN, DFCPL (FG)
Phenol	US\$/ton	China	1,069	4%	-1%	-7%	-9%	VO, CLEAN (RM), DN (FG)
PVC	Rs/kg	India	79	0%	-4%	-7%	-17%	CHEMPLAS, DCM, DCW, FINOLEX, RIL (FG)
Soda ash (China FOB)	US\$/ton	China	294	-2%	-15%	-5%	-16%	TTCH (FG)
Sodium nitrite	US\$/kg	India	0.52	0%	-8%	2%	-33%	DN (FG)
Toluene	US\$/ton	China	970	0%	4%	0%	-7%	ARTO (RM)
Vinyl acetate monomer	US\$/ton	China	989	0%	0%	13%	-13%	PIDI (RM)
<b>Fertilizers</b>								
Ammonia, local	US\$/ton	India	350	-30%	-30%	-39%	-59%	
Ammonia, int'l	US\$/ton	US	525	0%	0%	-16%	-46%	DFPC, CRIN (RM)
Phosphoric acid, local	US\$/ton	India	985	0%	0%	0%	-14%	CRIN (RM)
Rock phosphate	Index	Index	153	-56%	-56%	-56%	-49%	CRIN (RM)
DAP	US\$/ton	Morocco	583	1%	1%	1%	-25%	
DAP	US\$/ton	Global	608	4%	6%	13%	-5%	
Urea, local	US\$/ton	India	323	-20%	-20%	-20%	-44%	CHMB (FG)
Urea, int'l	US\$/ton	US	330	8%	10%	-6%	-18%	
Muriate of Potash	CNY/ton	China	2,800	-1%	-5%	-4%	-23%	
<b>Agrochemicals</b>								
Glyphosate	US\$/ton	China	3,628	-1%	-2%	-13%	-49%	BYRCS (FG)
<b>Chemical spreads</b>								
Phenol	US\$/ton	China	428	0%	-12%	-28%	42%	DN (FG)
<b>Energy prices</b>								
Brent crude	US\$/bbl		80	3%	1%	-9%	-7%	
Coal	US\$/ton	Indonesia	126	7%	-34%	-34%	-59%	
Natural Gas	US\$/mn BTU	US	3	-10%	0%	-13%	-16%	
Natural Gas	GBP/ mn BTU	UK	9	-22%	-24%	-17%	-78%	

**Notes:**

RM = Raw material, FG = Finished Good

Source: Bloomberg, Plastemart, Volza, Kotak Institutional Equities

Exhibit 41: Valuation comparables

	MCap	Rating	CMP	Upside	P/E (X)			CAGR 2023-25E (%)			Share price performance (%)			
	(US\$ mn)		(Rs)	(%)	2023	2024E	2025E	Revenue	EBITDA	EPS	1W	1M	3M	1Y
<b>Basics</b>														
Chemplast Sanmar	900	NR	473	NA	34.5	364.2	17.5	4.5	21.5	40.6	(3.2)	(5.3)	4.3	NA
DCM Shriram	1,886	NR	1,006	NA							(2.4)	(2.2)	3.6	15.3
Deepak Fertilisers	954	NR	628	NA	6.8	14.8	10.8	(4.9)	(11.4)	(20.8)	(2.6)	(7.6)	(1.3)	(0.3)
GNFC	1,405	NR	752	NA							0.9	(0.1)	13.0	42.5
GACL	677	NR	766	NA							(1.4)	(1.3)	6.4	12.1
GHCL	684	NR	594	NA	5.1	6.7	6.2	(7.4)	(9.2)	(9.4)	0.7	2.3	1.4	24.9
Tata Chemicals	3,104	SELL	1,013	(22.0)	11.1	19.3	25.9	(3.2)	(14.9)	(34.7)	(5.8)	(8.2)	6.0	7.2
<b>Non-Basics/Specialties/Diversified</b>														
Aarti	2,801	SELL	642	(15.9)	42.7	60.4	40.3	9.8	8.7	3.0	(5.4)	(1.1)	41.7	22.2
Aether Industries	1,351	NR	848	NA	79.8	66.2	44.5	30.7	35.7	33.9	(3.1)	(4.5)	(2.4)	(3.4)
Alkyl Amines	1,390	NR	2,261	NA	51.4	60.7	50.4	8.9	3.2	1.0	(4.8)	(10.8)	3.7	(13.3)
Ami Organics	508	NR	1,145	NA	56.4	48.8	49.4	14.2	7.5	6.9	1.3	2.1	(1.9)	30.4
Apcotex	300	NR	481	NA							(8.7)	(5.7)	(2.0)	11.0
Archean chemicals	920	NR	620	NA	17.9	18.5	21.4				0.4	(4.6)	2.0	
Atul	2,224	SELL	6,279	(35.5)	35.8	47.0	37.7	1.2	1.4	(2.6)	(4.9)	(12.2)	0.5	(10.3)
Balaji Amines	916	NR	2,350	NA	19.1			(5.6)	(14.1)		(5.1)	(11.9)	12.3	3.0
BASF India	1,549	NR	2,975	NA	27.3	24.3	21.9	6.0		21.3	(1.3)	(3.0)	18.7	15.1
Camlin Fine Sciences	259	NR	129	NA	27.0	32.2	13.1	14.4	19.2	43.3	(2.5)	(5.2)	(13.3)	(19.2)
Clean Science	1,822	ADD	1,426	3.8	51.3	78.5	44.9	12.4	7.3	6.8	(4.9)	(8.0)	7.9	NA
Deepak Nitrite	3,674	REDUCE	2,240	(5.4)	35.9	37.5	32.5	(3.0)	5.1	5.0	(4.9)	(9.7)	12.7	22.8
Gujarat Fluorochem	4,896	NR	3,706	NA	30.4	68.8	41.0	(0.9)	(9.3)	(13.9)	(0.5)	0.2	32.4	41.2
Himadri specialty chemical	1,962	NR	370	NA	92.6						(1.0)	19.6	55.1	307.3
Jubilant Ingrevia	882	NR	461	NA	20.0	27.2	18.4	4.0	(1.2)	4.5	(3.9)	(9.4)	6.1	(4.1)
Laxmi Organics	876	NR	265	NA	31.0	66.7	41.8	4.5	10.1	(13.9)	(4.8)	(8.9)	4.2	(3.0)
Meghmani organics	1,351	NR	506	NA										
NFIL	1,982	ADD	3,324	8.9	43.9	47.9	33.7	20.9	24.6	14.2	(2.5)	(13.7)	(3.1)	(12.8)
Neogen	444	NR	1,399	NA	59.1	63.1	41.0	26.6	26.4	20.1	(4.3)	(5.5)	(13.3)	16.1
Nocil	543	NR	271	NA	30.6	35.1	27.6	3.7	4.1	5.2	(0.6)	(1.0)	22.9	28.2
Sudarshan	433	NR	520	NA	104.6	36.7	22.7	12.2	41.5	114.5	(0.5)	(5.3)	9.1	34.7
Supreme Petro	1,321	NR	584	NA										
Tanfac Industries Ltd	255	NR	2,123	NA										
Vinati	2,121	SELL	1,710	(11.7)	38.5	47.3	35.1	10.1	7.8	11.5	(0.1)	(1.9)	(1.8)	(7.5)
Vishnu chemicals	253	NR	321	NA										
SRF	8,009	BUY	2,247	17.1	30.8	44.6	30.8	6.8	6.2	0.1	(2.7)	(9.4)	3.3	5.4
Tatva Chintan	373	NR	1,327	NA	55.5	81.4	32.8	22.4	46.7	30.2	(9.5)	(17.1)	(10.0)	NA
Yasho Industries	224	NR	1,635	NA										
<b>HPC</b>														
Fine Organics	1,694	NR	4,594	NA	24.4	34.9	34.4	(13.7)	(16.2)	(15.7)	0.3	(7.7)	0.5	(11.5)
Galaxy surfactants	1,162	NR	2,726	NA	25.7	29.5	25.4	(0.6)	1.8	0.7	(0.0)	(1.8)	5.1	17.5
Privi	561	NR	1,194	NA							4.4	1.5	(2.3)	17.4
Oriental Aromatics	152	NR	375	NA							(2.5)	(6.2)	10.3	(1.5)
Rossari Bio	481	NR	762	NA	36.1	30.5	22.7	13.0	15.2	26.2	(3.4)	(4.7)	0.9	8.6
<b>Agrochemicals</b>														
Anupam Rasayan	1,227	NR	930	NA	51.5	48.1	33.4	25.8	23.8	24.2	(1.4)	(11.6)	9.2	55.9
Astec LifeScience	226	NR	959	NA	31.7	(61.6)	54.4	(5.2)	(12.7)	(23.7)	(6.7)	(12.4)	(20.3)	(38.1)
Bayer CropSc	3,172	REDUCE	5,868	(13.4)	38.8	31.2	28.0	9.4	10.9	17.8	2.0	5.7	20.8	30.5
Bharat Rasayan	454	NR	9,091	NA							(2.7)	1.0	2.6	(0.7)
Best Agro	222	NR	781	NA							(2.8)	(7.0)	(24.6)	(34.3)
Chambal Fertilizers	1,856	NR	371	NA	13.2	11.4	10.9	(15.3)	6.0	10.0	(0.7)	(0.7)	32.6	27.1
Coromandel Intl	4,027	NR	1,138	NA	15.9	17.8	15.3	(8.4)	0.2	2.0	(3.8)	(9.1)	5.9	33.2
Godrej Agrovet	1,228	ADD	531	(0.2)	44.2	31.6	23.5	9.0	26.2	37.1	(2.0)	(4.7)	14.4	17.2
PI Industries	6,009	ADD	3,293	10.2	40.6	31.9	29.9	16.1	18.9	16.5	(3.3)	(6.3)	(0.7)	11.3
Rallis	619	SELL	265	(16.9)	56.3	32.0	25.2	2.9	29.4	49.5	3.7	6.0	21.4	28.1
Sharda Cropchem	431	NR	398	NA	10.4	45.8	14.7	(1.0)	(7.9)	(15.6)	(8.1)	(12.2)	(2.6)	(18.8)
Sumitomo Chemicals	2,381	NR	397	NA	38.6	51.1	37.2	0.3	(1.4)	1.7	(1.5)	(1.8)	3.4	(13.5)
UPL	4,872	REDUCE	540	1.9	11.8	19.7	13.5	1.0	(0.1)	(6.5)	(2.5)	(8.1)	(3.4)	(27.5)

Source: Bloomberg, Kotak Institutional Equities estimates

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## Ratings and other definitions/identifiers

### Definitions of ratings

**BUY.** We expect this stock to deliver more than 15% returns over the next 12 months.

**ADD.** We expect this stock to deliver 5-15% returns over the next 12 months.

**REDUCE.** We expect this stock to deliver -5+5% returns over the next 12 months.

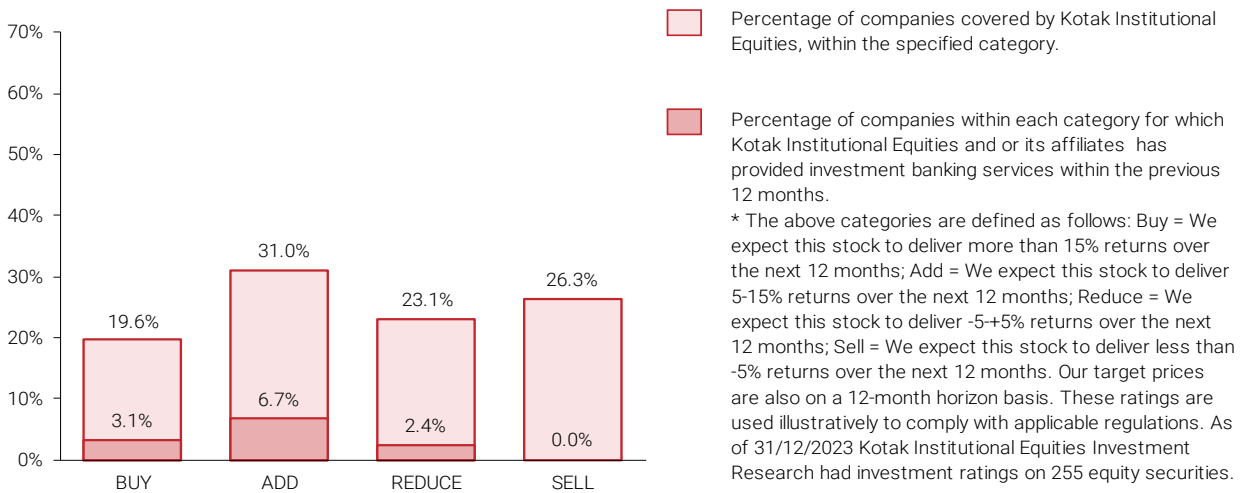
**SELL.** We expect this stock to deliver <-5% returns over the next 12 months.

Our Fair Value estimates are also on a 12-month horizon basis.

Our Ratings System does not take into account short-term volatility in stock prices related to movements in the market. Hence, a particular Rating may not strictly be in accordance with the Rating System at all times.

### Distribution of ratings/investment banking relationships

Kotak Institutional Equities Research coverage universe



Source: Kotak Institutional Equities

As of December 31, 2023

### Coverage view

The coverage view represents each analyst's overall fundamental outlook on the Sector. The coverage view will consist of one of the following designations: **Attractive, Neutral, Cautious.**

### Other ratings/identifiers

**NR = Not Rated.** The investment rating and fair value, if any, have been suspended temporarily. Such suspension is in compliance with applicable regulation(s) and/or Kotak Securities policies in circumstances when Kotak Securities or its affiliates is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances.

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**NC = Not Covered.** Kotak Securities does not cover this company.

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