




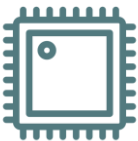






Advanced Materials and Chemicals Update

February 2024

Advanced Polymers 	Agriculture Chemicals 	Catalysts 	ChemTech 	Coatings 
Electronic Materials 	Engineered Materials 	Biosciences / Bio-Chemicals / Bio-Industrials 	Ingredients and Additives 	Sustainable Materials 

Keith Tauro

Head of Advanced Materials and Chemicals, Americas
New York, NY

Mobile: +1 646 617 0791

keith.tauro@nomuragreentech.com

C W James VanMilder

Head of Nomura Greentech Equity Capital Markets
New York, NY

Mobile: +1 703 624 8705

james.vanmilder@nomuragreentech.com

Niul Wood

Head of Advanced Materials and Chemicals, EMEA
London, U.K.

Mobile: +44 792 564 2383

niul.wood@nomura.com

Key Index Trading Performance

	Share Price Performance (Indexed to Today)				
	3-Years	1-Year	YTD	3 Months	1 Month
S&P 500	31%	28%	7%	12%	3%
S&P Chemicals Index	16%	6%	2%	7%	6%
S&P Commodity Chemicals Index	2%	1%	3%	9%	4%
S&P Specialty Chemicals Index	4%	11%	1%	10%	6%

(Indexed to 100)



	Average Performance (EV / NTM EBITDA)					
	3-Years	1-Year	YTD	3 Months	1 Month	Current
S&P 500	13.2x	13.0x	13.6x	13.5x	13.8x	14.0x
S&P Chemicals Index	10.8x	11.1x	11.7x	11.7x	11.8x	12.2x
S&P Commodity Chemicals Index	6.2x	7.0x	7.4x	7.4x	7.5x	7.6x
S&P Specialty Chemicals Index	13.3x	12.4x	13.4x	13.4x	13.6x	14.1x

(EV / NTM EBITDA)



Advanced Materials and Chemicals Industry M&A Activity

	2024		2023		YoY Change	
	#	Value (\$bns)	#	Value (\$bns)	#	Value
January	55	\$2.2	71	\$2.4	(23%)	(8%)
February	37	\$3.0	44	\$2.3	(16%)	29%
Year to Date	92	\$5.2	115	\$4.7	(38%)	20%

Select Mergers & Acquisitions

- On February 7, **Mangalore Chemicals and Fertilizers (MCF)**, an India-based manufacturer of chemical fertilizers, merged with **Pardeep Phosphates**, an India-based manufacturer of phosphate fertilizers ([Press Release](#))
- On February 8, **Trelleborg**, a Sweden-based manufacturer of products to seal, damp, and protect critical applications, acquired **Baron Group**, an Australia-based company manufacturing advanced precision silicone components ([Press Release](#))
- On February 15, **Henkel**, a provider of adhesives, sealants and functional coatings, acquired **Seal for Life Industries**, a provider of coating and sealing solutions for infrastructure assets, from **Arsenal Capital Partners**, a Private Equity firm focusing on the industrial and healthcare sectors ([Press Release](#))
- On February 19, **ADM**, a global human and animal nutrition company, acquired **Fuerst Day Lawson Limited**, a leading ingredient solutions provider, from **Highlander Partners**, a Private Equity firm ([Press Release](#))
- On February 20, **The Amlon Group**, a portfolio company of **Heartwood Partners** providing industrial, medical and destruction waste solutions, acquired **EcoWater Industries**, an industrial waste-to-value processor providing industrial equipment clean-out services ([Press Release](#))
- On February 20, **LyondellBasell**, a petrochemical and specialty chemicals producer, acquired mechanical recycling assets containing rigid plastics recycling processing lines from **PreZero**, a global recycling leader and waste management service provider ([Press Release](#))
- On February 21, **Orica**, an Australia-based global manufacturer and supplier of chemicals and explosives, **Cyanco**, manufacturer and distributor of sodium cyanide for the gold mine industry, for **\$640mm** ([Press Release](#))
- On February 26, **PPG**, a manufacturer of paints, coatings and specialty materials, announced review of strategic alternatives for its US and Canada architectural coatings business; in January 2024, PPG had announced the review of alternatives for its silica products business line ([Press Release](#))
- On February 28, **Ginko Bioworks**, a synthetic biology company, acquired **Patch Biosciences**, a provider of AI platform for sequence designing, **Reverie Labs**, a company utilizing AI/ML tools for drug discovery and **Proof Diagnostics**, a life sciences tool and computational discovery company ([Press Release](#), [Press Release](#), [Press Release](#))

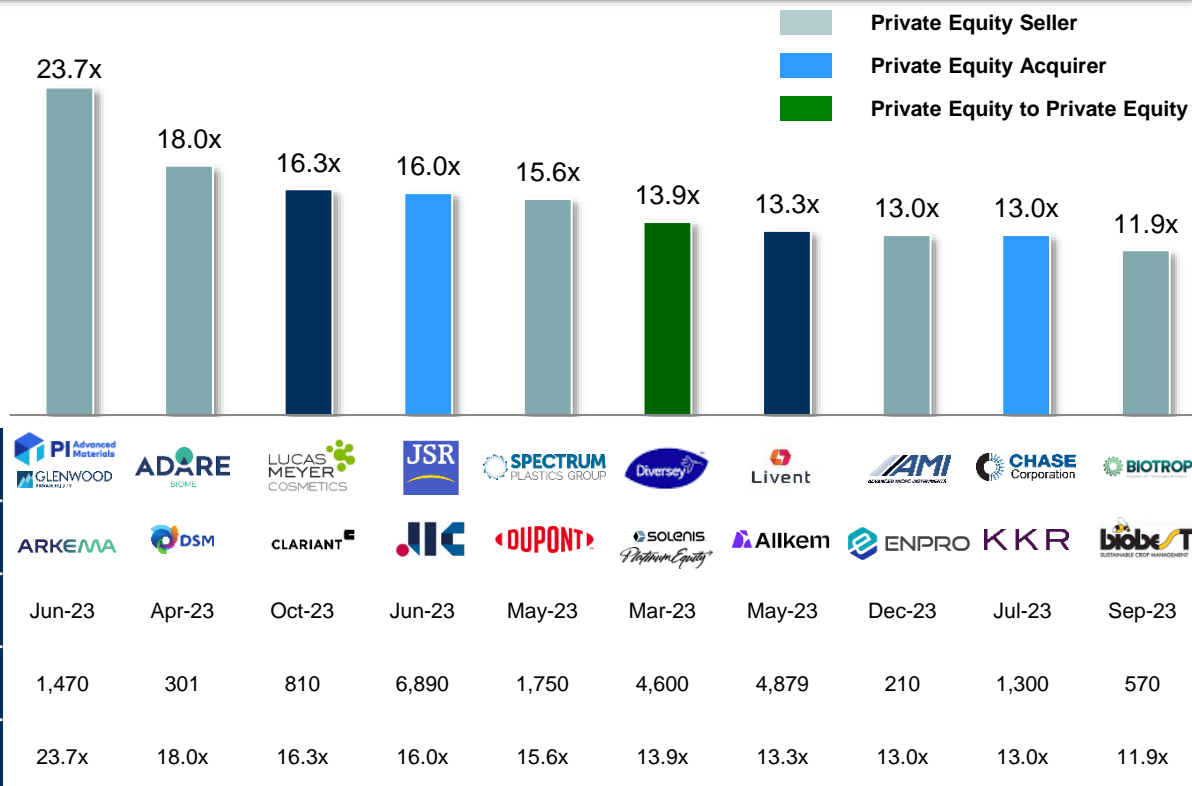
Select Capital Raises

- On February 15, **Koppert**, a Netherlands-based developer of crop protection solutions, raised **\$151mm** in preferred share capital from **Hal Investments** ([Press Release](#))
- On February 21, **Syzygy Plasmonics**, a developer of photocatalytic reactors designed to electrify chemical manufacturing, raised an undisclosed amount of capital from **Zeon Corporation**, through Zeon's VC arm **Zeon Ventures** ([Press Release](#))
- On February 21, **Tsubame BHB**, a developer of an electrified catalyst technology used in ammonia production process, raised **¥5.3bn (\$35mm)** in **Series C** funding from **Heaeus**, **Yokogawa Electric Corp** and **Energy and Environment Investment** ([Press Release](#))

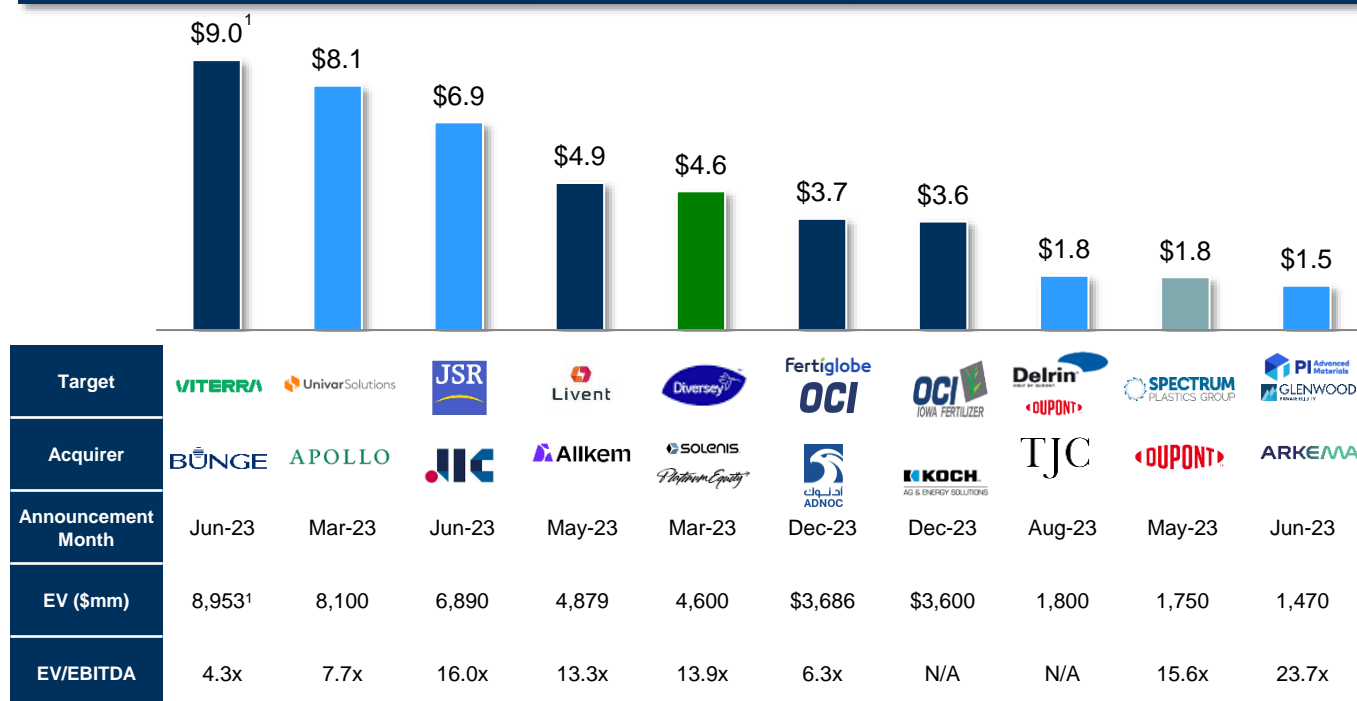
**Corporate and
Market
Announcements**

- **Aramco**, a Saudi Arabia-based integrated energy and chemicals companies, and **DHL Supply Chain (DHL)**, a global leader in contract logistics, formed a JV, ASMO (Advanced Supply Management Operations), designed to be a new Procurement and Logistics Services Hub in Saudi Arabia ([Press Release](#))
- **SenesTech**, a leader in fertility control to manage animal pest populations, entered a distribution agreement with **Agro Technic**, a Singapore-based pest control product manufacturer and distributor ([Press Release](#))
- **Evogene**, an Israel-based computational biology platform, entered into a collaboration agreement with **Verb Biotics**, a microbiome health ingredient company, to develop new strains of human health and vitality improving probiotic bacteria ([Press Release](#))
- **SI Group**, a leading global developer and manufacturer of performance additives, process solutions, pharmaceuticals and chemical intermediates, announced a long-term supply partnership with **Liaoning Dingjide Petrochemical**, a China-based manufacturer of additives and other specialty chemicals ([Press Release](#))
- **Univar Solutions**, a global solutions provider of specialty ingredients and chemicals, announced an exclusive distribution agreement in the United States and Canada with **Extractos Naturales Gelymar**, a producer and distributor of textural solutions for the personal care industry ([Press Release](#))
- **Ingredion**, a specialty ingredient solutions provider for the food and beverage manufacturing industry, announced the introduction of a new product NOVATION® Indulge 2940 starch, expanding their line of clean label texturizers with the first non-GMO functional native corn starch ([Press Release](#))
- **Elementis**, a global specialty chemicals player, signed a partnership with the **Centre for Biotechnology and Fine Chemistry of Universidade Catolica Portuguesa** to develop chemically sustainable products in Porto, Portugal ([Press Release](#))
- **Venator Materials**, a manufacturer of pigment and additive products, announced that it intends to shut down TiO₂ production in Duisburg, Germany following emergence from Chapter 11 bankruptcy ([Press Release](#))
- **BASF Coatings**, a division of BASF focused on innovative and sustainable automotive OEM and refinish coatings, decorative paints and applied surface treatments, signed a Global Preferred Partnership agreement with **INEOS Automotive**, a manufacturer of petrochemicals, specialty chemicals and oil products, for INEOS's Global Body and Paint Program ([Press Release](#))
- **BASF**, one of the world's largest chemicals company, has partnered with **OQEMA**, a Germany-based chemical distributor, to expand BASF's amines portfolio, excluding ethanolamines in UK and Ireland ([Press Release](#))

Highest Multiples Paid



Largest Transaction Size by EV



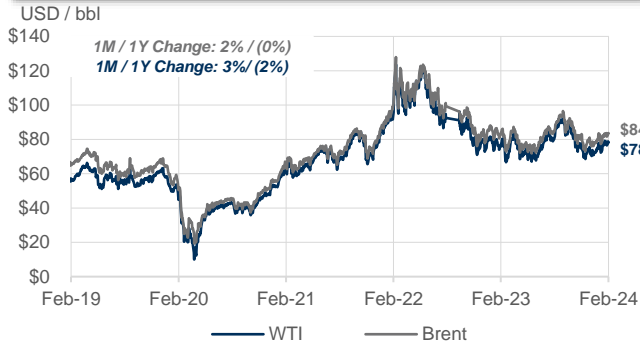
Source: Company filings, Mergermarket, Dealogic, Factset as of February 29th, 2024. All estimates reflect Factset consensus estimates.

1. Bunge acquisition of Viteria assumes RMI of \$9.0bn to be netted off from net debt.

Nomura is not associated, affiliated, authorized, sponsored, or endorsed by any of the third parties referenced herein. All third party names, marks, and logos are trademarks™ or registered® trademark of their respective owners.

Markets Update

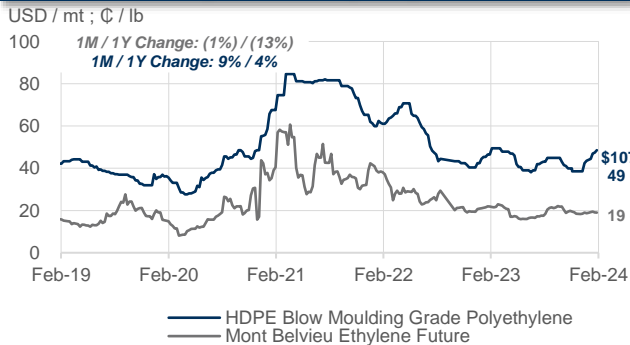
WTI / Brent



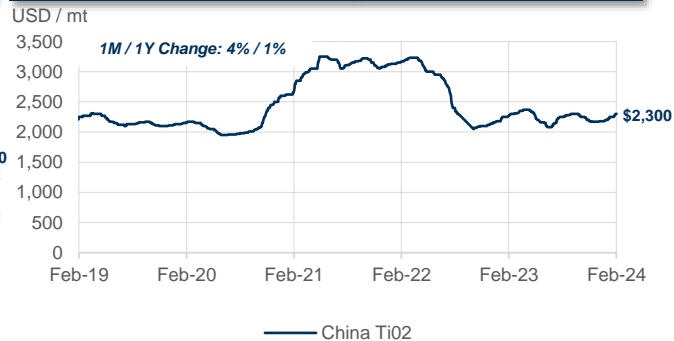
Natural Gas



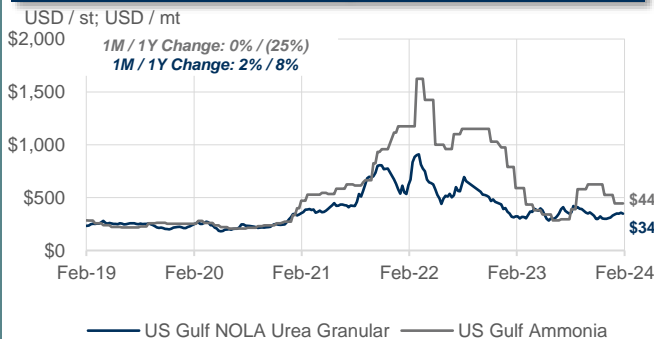
Ethylene / Polyethylene



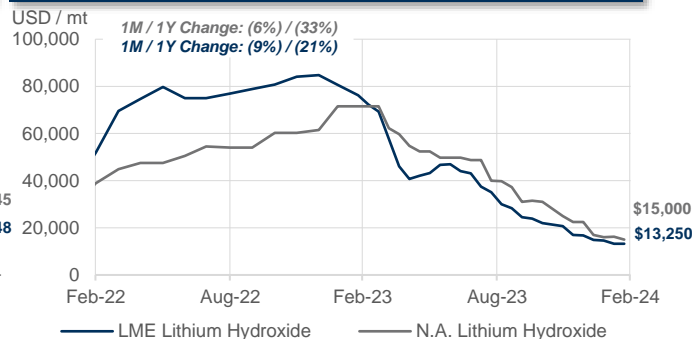
TiO₂



Nitrogen



Lithium



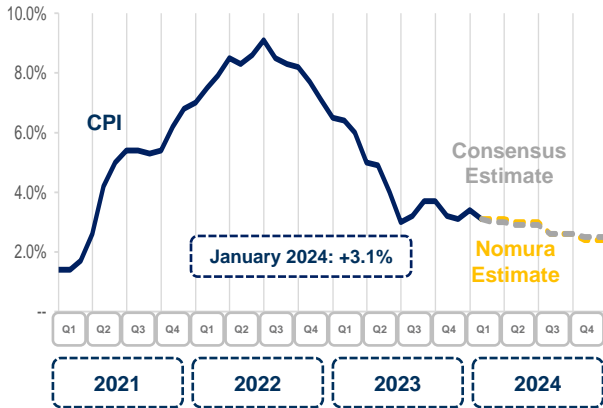
Corn



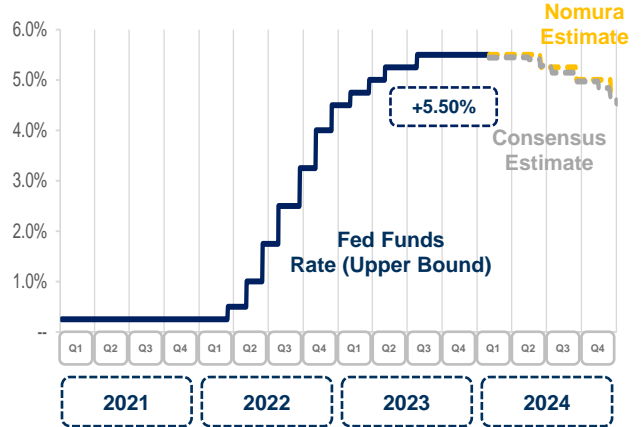
Soy



Inflation Estimates Approaching Fed Target

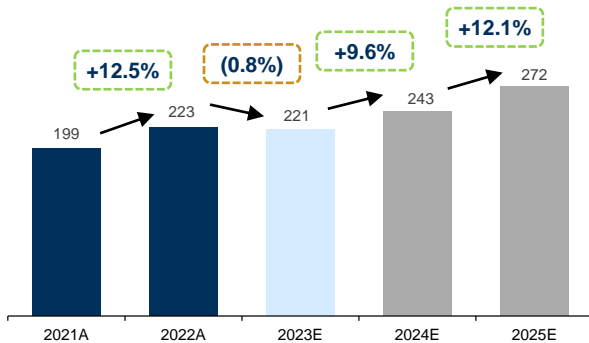


Rates Remaining Higher for Longer

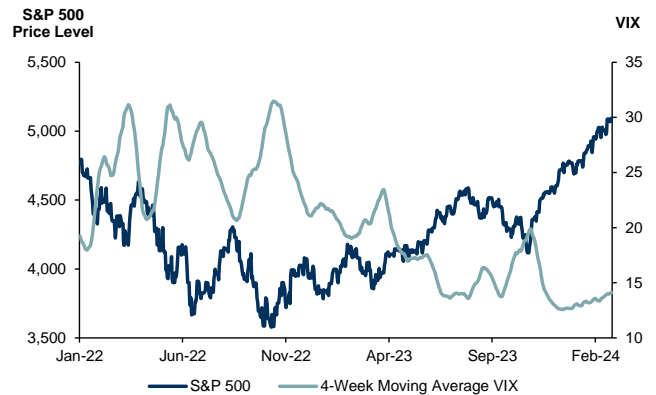


Markets Looking Past '23 Earnings Contraction

Consensus S&P 500 Expected Earnings



S&P 500 at All-Time High While VIX at Four Year Low

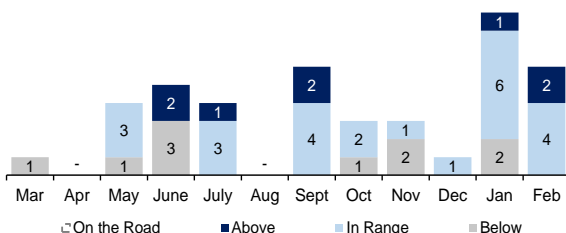


IPO Activity Has Picked Up in 2024

Total IPO Proceeds (\$bn)

0.3 -- 5.6 1.7 1.0 -- 7.1 1.9 0.7 0.1 4.4 2.2

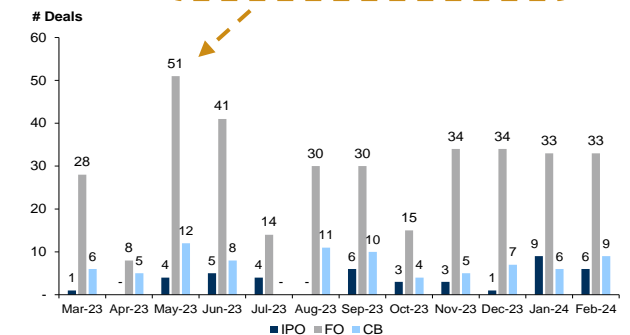
January 2024 was the busiest month by # of IPOs since November 2021



Follow-On Activity Remains Elevated

Deals

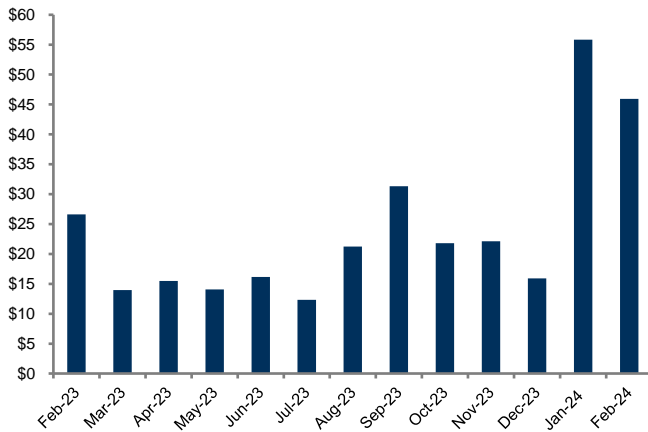
May was the first month since November 2021 to break 50+ follow-on offerings and 12+ converts¹



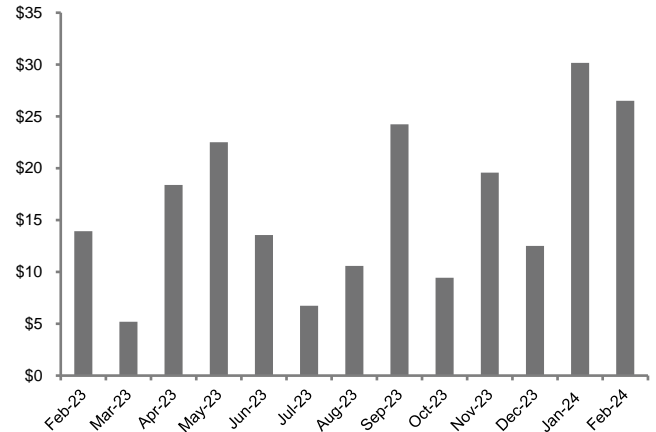
Source: Bloomberg as of market close February 29th, 2024. Inflation chart reflects January data.

1. November 2021 saw 23 IPOs, 69 Follow-Ons and 18 Convertible Bonds over \$50m priced

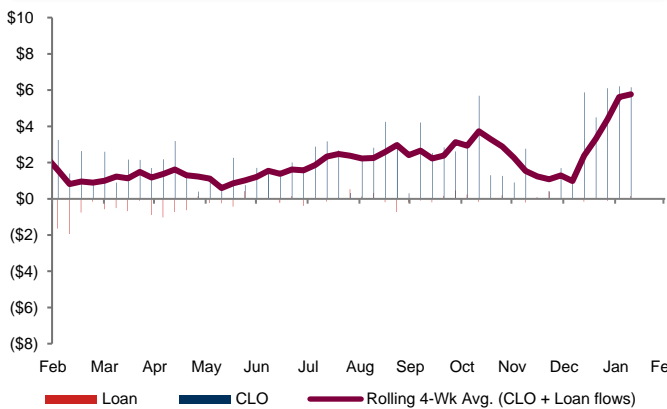
Loan Volume



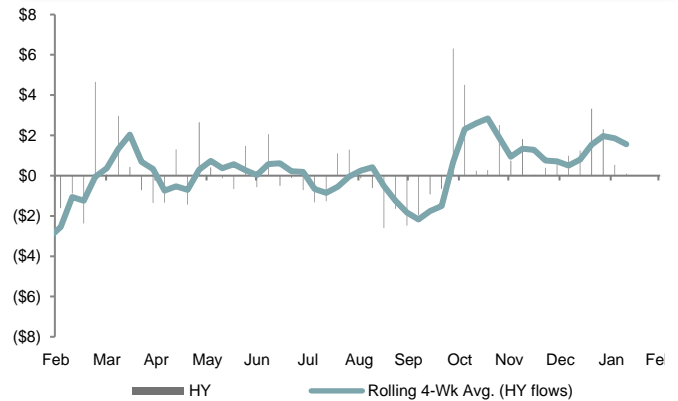
High Yield Volume (\$bn)



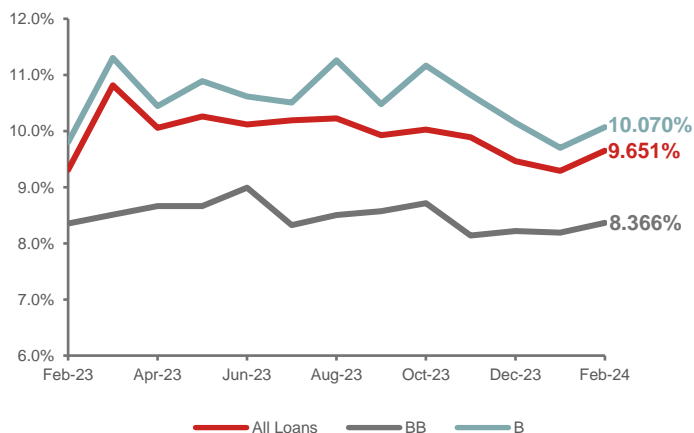
CLO Issuance + Loans Funds Flows (\$bn)



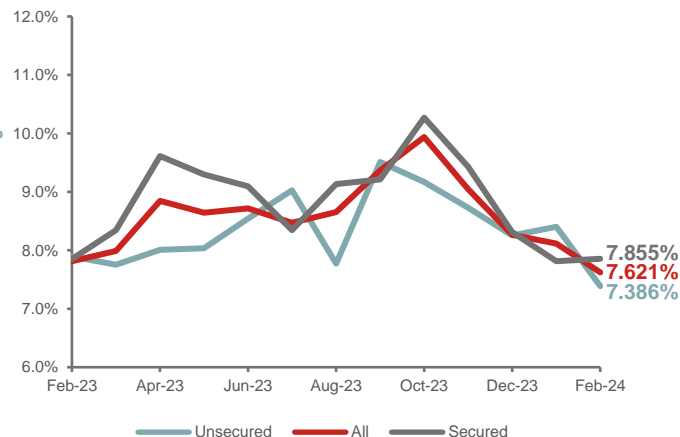
Recent High Yield Funds Flows (\$bn)



Leveraged Loan New Issue Yields¹



High Yield New Issue Yields



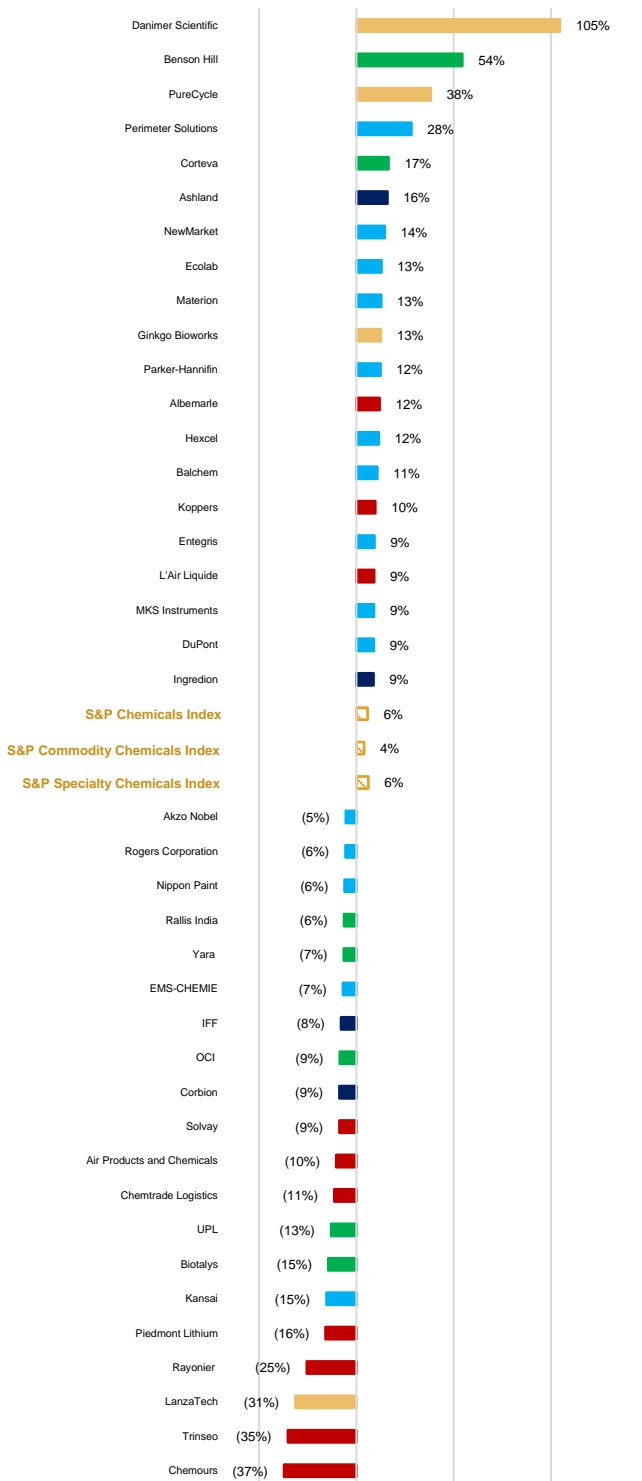
Source: Nomura, LCD.

1. Reflects rolling 30-day period.

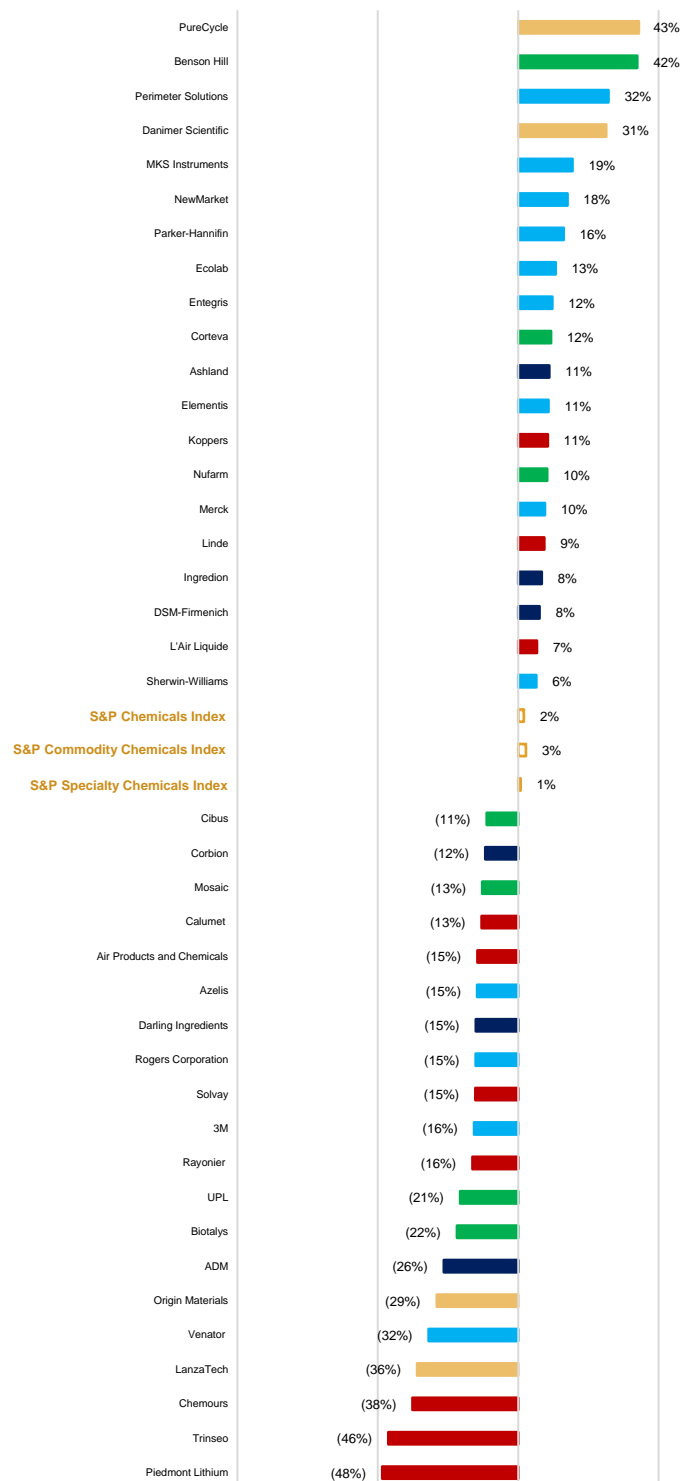
Advanced Materials and Chemicals

Share Price Performance

1 Month (Top & Bottom 20 Performers)



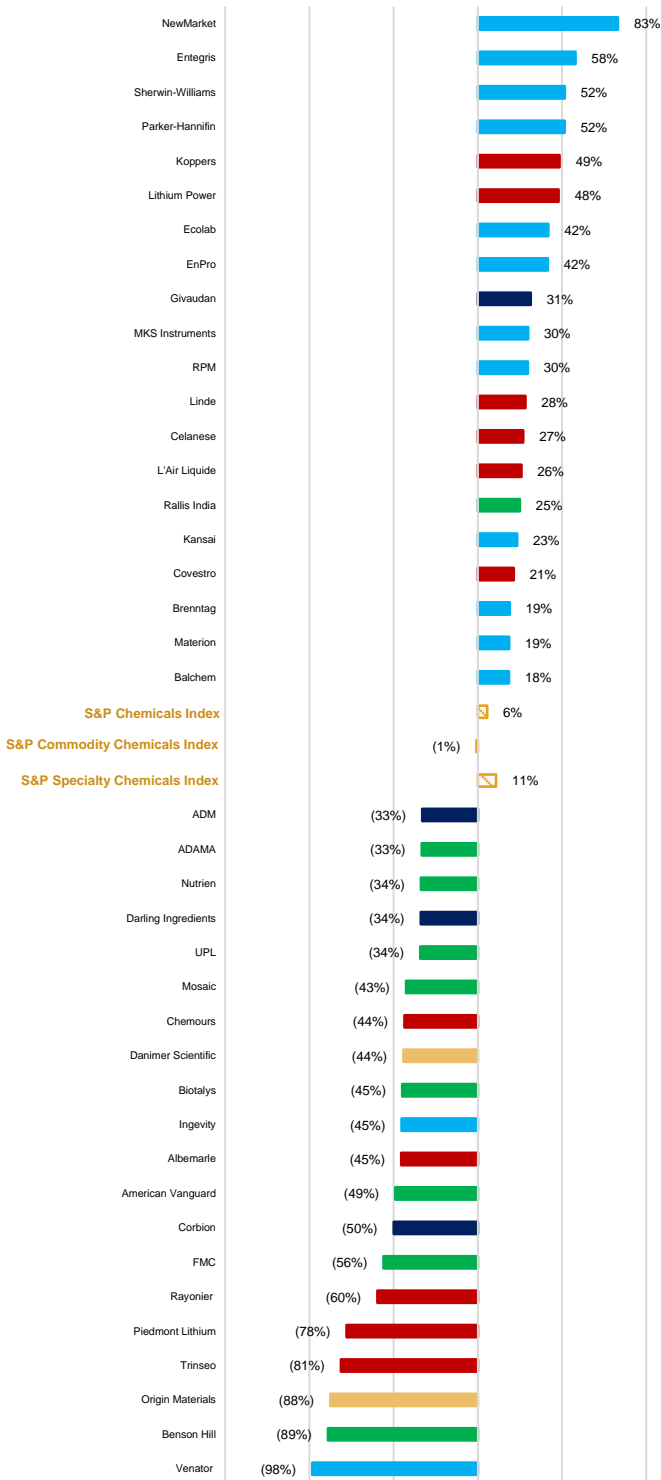
Year-to-Date (Top & Bottom 20 Performers)



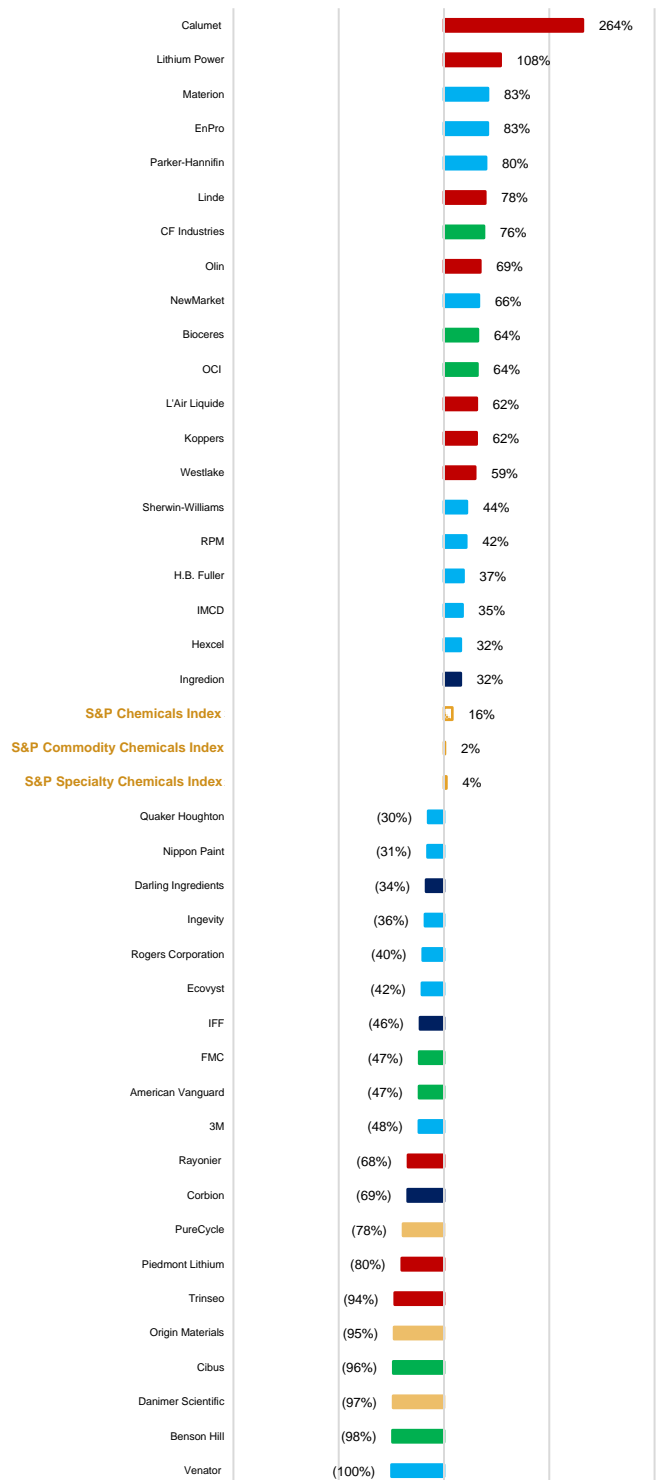
Advanced Materials and Chemicals

Share Price Performance

1 Year (Top & Bottom 20 Performers)



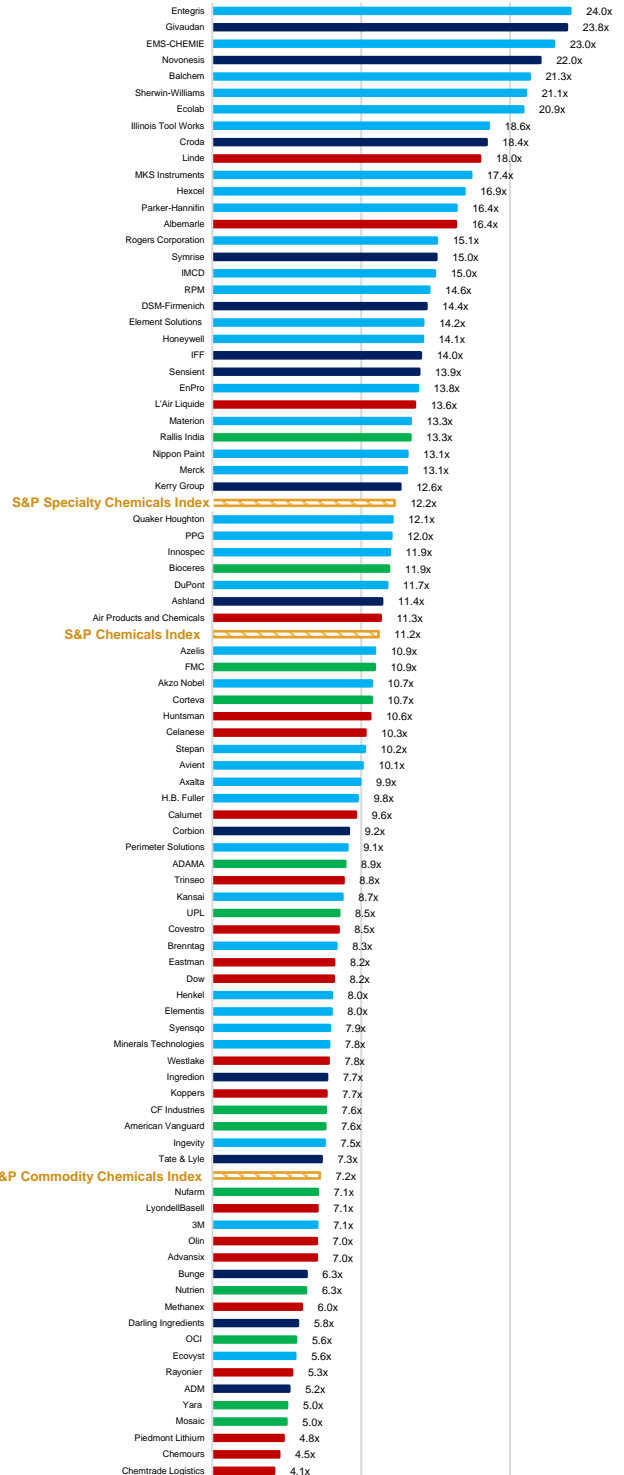
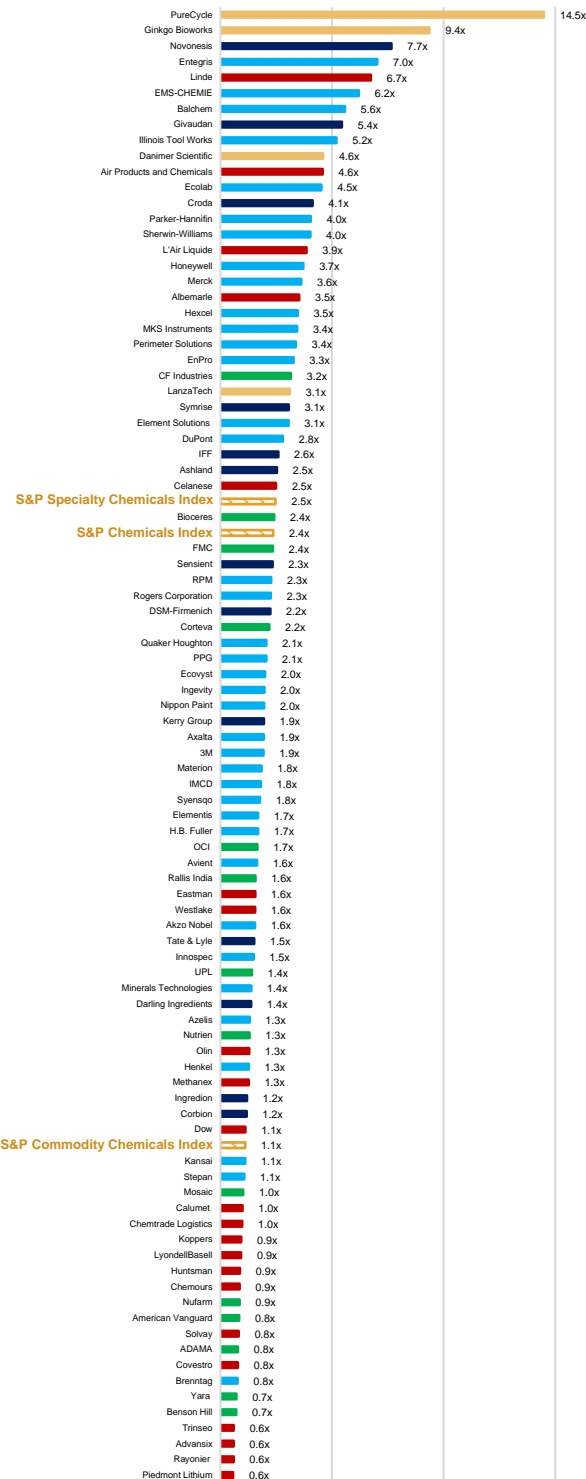
3 Years (Top & Bottom 20 Performers)



Advanced Materials and Chemicals Trading Multiples

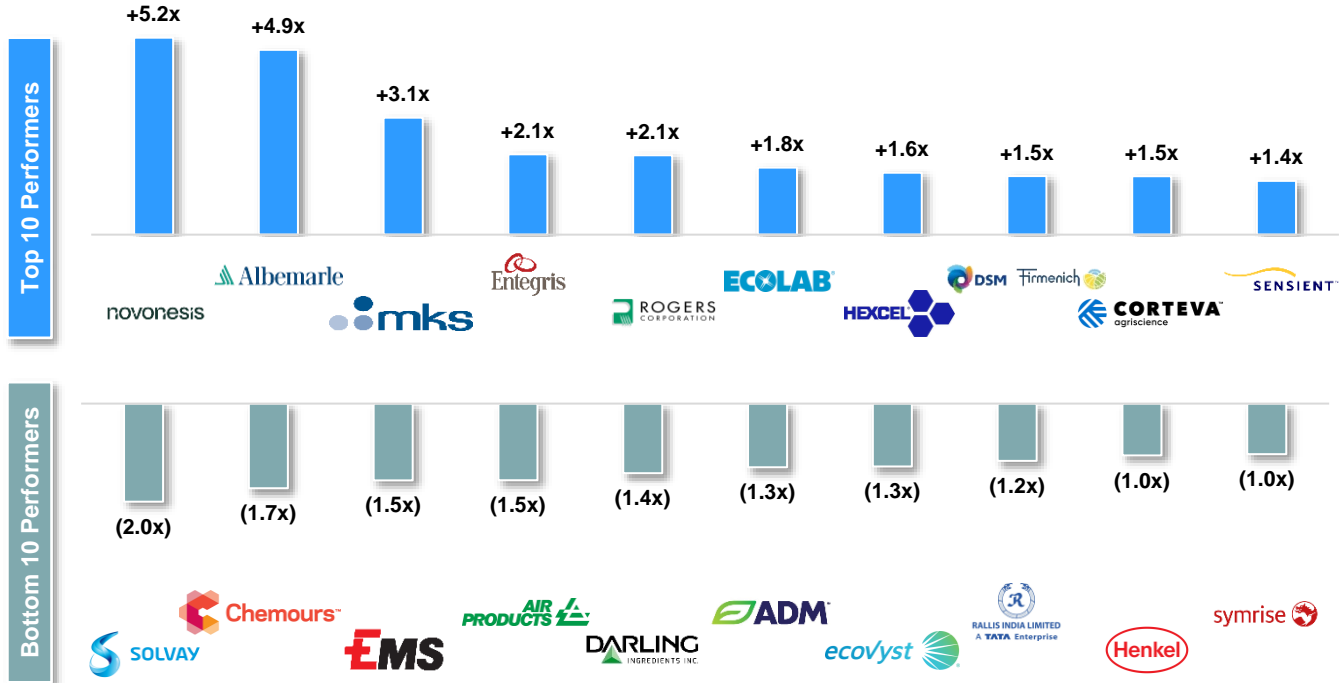
EV / 2024E Sales

EV / 2024E EBITDA

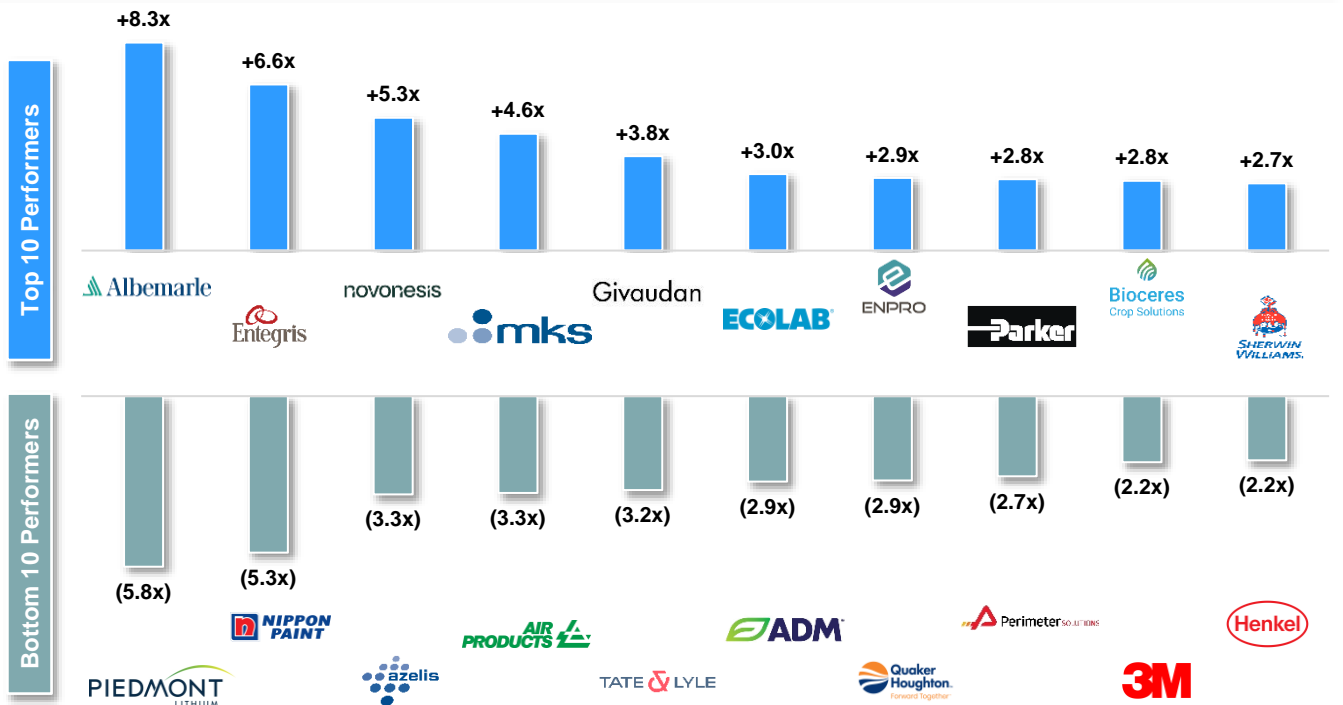


Advanced Materials and Chemicals Top & Bottom Performers (EV Multiple)

1 Month Change (EV / NTM EBITDA)



1 Year Change (EV / NTM EBITDA)



Source: Factset as of February 29th, 2024. All estimates reflect Factset consensus estimates.

Nomura is not associated, affiliated, authorized, sponsored, or endorsed by any of the third parties referenced herein. All third party names, marks, and logos are trademarks™ or registered® trademark of their respective owners.

Trading Comparables

Advanced Materials and Chemicals

Trading Comparables

Agriculture Chemicals

	Local	Local		Price	Return	Dividend	Sales	EBITDA	EBITDA	Sales		Equity	Enterprise	EV/Sales	EV/EBITDA	Price/Earnings	Net Leverage
Company	Currency	Price as of	% of	Return	YTD	Yield	2024E	2024E	Margin	CAGR		Value	Value	2024E	2024E	2025E	2024E
AgChem Majors																	
Corteva	USD	53.52	84%	12%	1.3%	17,585	3,600	20.5%	3.3%	37,835	38,526	2.2x	10.7x	9.5x	18.8x	15.5x	(0.2x)
FMC	USD	56.39	44%	(11%)	4.2%	4,558	982	21.6%	4.1%	7,060	10,718	2.4x	10.9x	9.4x	14.9x	11.4x	3.7x
Mean			64%	1%	2.7%			21.0%	3.7%			2.3x	10.8x	9.4x	16.9x	13.4x	1.8x
Median			64%	1%	2.7%			21.0%	3.7%			2.3x	10.8x	9.4x	16.9x	13.4x	1.8x
ADAMA	CNY	6.53	61%	(6%)	0.2%	5,245	461	8.8%	13.6%	2,115	4,119	0.8x	8.9x	7.6x	46.3x	22.9x	4.4x
American Vanguard	USD	10.72	47%	(2%)	n.a.	614	68	11.0%	3.7%	311	515	0.8x	7.6x	7.1x	15.8x	12.6x	3.0x
Nufarm	AUD	5.76	94%	10%	2.0%	2,430	295	12.2%	5.8%	1,442	2,094	0.9x	7.1x	6.4x	16.4x	12.8x	1.6x
Rallis India	INR	247.65	84%	(2%)	1.4%	362	43	11.8%	10.7%	581	568	1.6x	13.3x	10.9x	25.6x	19.9x	(0.4x)
UPL	INR	469.55	62%	(21%)	1.5%	5,640	935	16.6%	5.2%	4,251	7,966	1.4x	8.5x	6.8x	22.5x	10.9x	3.9x
Mean			72%	0%	1.2%			10.9%	8.4%			1.0x	9.2x	8.0x	26.0x	17.1x	2.2x
Median			73%	(2%)	1.4%			11.4%	8.3%			0.9x	8.3x	7.4x	21.0x	16.4x	2.3x

Agriculture Technology

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Ag. Tech																	
Benson Hill	USD	0.25	11%	42%	n.a.	109	(44)	n.m.	(46.3%)	54	77	0.7x	n.m.	n.m.	n.m.	n.m.	(0.5x)
Bioceres	USD	13.13	92%	(4%)	n.a.	555	113	20.3%	23.2%	1,162	1,336	2.4x	11.9x	n.m.	18.1x	9.5x	1.6x
Biotalsys	EUR	3.65	53%	(22%)	0.0%	3	(9)	n.m.	0.0%	130	108	33.1x	n.m.	n.m.	n.m.	n.m.	2.4x
Cibus	USD	17.44	45%	(11%)	n.a.	2	(57)	n.m.	177.9%	445	544	n.m.	n.m.	n.m.	n.m.	n.m.	0.5x
Mean			50%	1%	0.0%			20.3%	38.7%			12.1x	11.9x	NA	18.1x	9.5x	1.0x
Median			49%	(8%)	0.0%			20.3%	11.6%			2.4x	11.9x	NA	18.1x	9.5x	1.1x

Coatings, Adhesives, Sealants and Elastomers (CASE)

	Local	Price as of	% of	Price Return	Dividend	Sales	EBITDA	EBITDA	Sales	Equity	Enterprise	EV/Sales	EV/EBITDA	Price/Earnings	Net Leverage		
Company	Currency	29-Feb-2024	52 week high	YTD	Yield	2024E	2024E	Margin	CAGR	Value	Value	2024E	2024E	2025E	2024E	2025E	2024E
CASE																	
Akzo Nobel	EUR	67.34	85%	(10%)	2.9%	11,598	1,682	14.5%	1.8%	12,483	18,013	1.6x	10.7x	9.9x	15.6x	13.8x	3.3x
Axalta	USD	32.73	95%	(4%)	0.3%	5,314	1,039	19.6%	3.0%	7,276	10,316	1.9x	9.9x	9.4x	17.4x	15.3x	2.7x
H.B. Fuller	USD	79.53	95%	(2%)	1.1%	3,644	629	17.3%	4.3%	4,523	6,144	1.7x	9.8x	9.1x	18.1x	15.7x	2.6x
Henkel	EUR	62.40	89%	(4%)	3.2%	23,281	3,713	15.9%	1.5%	29,325	29,809	1.3x	8.0x	7.7x	13.4x	12.4x	0.0x
Kansai	JPY	2,170.00	82%	(10%)	1.9%	3,861	492	12.7%	5.1%	3,860	4,299	1.1x	8.7x	8.6x	11.4x	13.3x	(0.0x)
Nippon Paint	JPY	1,110.50	85%	(3%)	1.4%	10,383	1,550	14.9%	6.9%	17,427	20,311	2.0x	13.1x	12.1x	20.9x	19.0x	1.9x
PPG	USD	141.60	93%	(5%)	1.9%	18,662	3,192	17.1%	2.9%	33,494	38,375	2.1x	12.0x	11.3x	16.7x	15.1x	1.4x
Quaker Houghton	USD	200.50	90%	(6%)	0.5%	2,006	342	17.0%	4.9%	3,652	4,133	2.1x	12.1x	11.2x	22.6x	19.7x	1.6x
RPM	USD	115.35	97%	3%	1.4%	7,599	1,186	15.6%	4.1%	15,256	17,284	2.3x	14.6x	13.4x	21.7x	19.4x	1.7x
Sherwin-Williams	USD	332.03	95%	6%	0.8%	23,753	4,542	19.1%	3.8%	86,069	95,643	4.0x	21.1x	19.5x	29.1x	26.2x	2.1x
Mean			91%	(3%)	1.5%			16.4%	3.8%			2.0x	12.0x	11.2x	18.7x	17.0x	1.7x
Median			91%	(4%)	1.4%			16.5%	4.0%			1.9x	11.4x	10.5x	17.8x	15.5x	1.8x

Chemical Distribution

	Local	Local					Sales	EBITDA	EBITDA	Sales		Enterprise	EV/Sales	EV/EBITDA	Price/Earnings	Net Leverage		
	Currency	Price as of	% of	Price Return	Dividend				Margin	CAGR	Value	Value						
Company		29-Feb-2024	52 week high	YTD	Yield		2024E	2024E	2024E	2023E-2025E			2024E	2024E	2025E	2024E	2025E	2024E
Chemicals Distribution																		
Azelis	EUR	18.94	76%	(15%)	1.7%		4,848	582	12.0%	6.0%	4,999	6,353	1.3x	10.9x	10.3x	17.0x	15.4x	2.2x
Brenntag	EUR	84.38	97%	1%	2.5%		19,296	1,784	9.2%	3.9%	13,243	14,858	0.8x	8.3x	7.8x	15.2x	14.0x	0.9x
IMCD	EUR	140.90	88%	(11%)	1.6%		5,191	630	12.1%	5.7%	8,696	9,421	1.8x	15.0x	13.9x	23.5x	21.5x	1.1x
Mean			87%	(8%)	1.9%				11.1%	5.2%			1.3x	11.4x	10.7x	18.5x	17.0x	1.4x
Median			88%	(11%)	1.7%				12.0%	5.7%			1.3x	10.9x	10.3x	17.0x	15.4x	1.1x

Chemical Technology

		Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales	EBITDA	EBITDA Margin	Sales CAGR	Equity Value	Enterprise Value	EV/Sales	EV/EBITDA	Price/Earnings	Net Leverage
Company	Local Currency					2024E	2024E	2024E	2023E-2025E			2024E	2024E 2025E	2024E 2025E	2024E
ChemTech															
Danimer Scientific	USD	1.34	29%	31%	n.a.	96	(18)	(18.9%)	76.5%	141	443	4.6x	n.m.	28.4x	n.m. n.m.
Origin Materials	USD	0.59	12%	(29%)	n.a.	122	(66)	n.m.	109.1%	93	(60)	n.m.	0.9x	0.9x	n.m. n.m.
PureCycle	USD	5.79	49%	43%	n.a.	91	(16)	(17.2%)	n.m.	978	1,326	14.5x	n.m.	n.m.	n.m. n.m.
Mean			30%	15%	NA			(18.1%)	92.8%			9.5x	0.9x	14.7x	NA NA
Median			29%	31%	NA			(18.1%)	92.8%			9.5x	0.9x	14.7x	NA NA

Commodity

		Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E 2025E	Price/Earnings 2024E 2025E	Net Leverage 2024E		
Company	Local Currency																
Commodity																	
Advansix	USD	27.98	68%	(7%)	n.a.	1,529	130	8.5%	5.0%	765	911	0.6x	7.0x	4.0x	24.9x	7.0x	1.1x
Chemtrade Logistics	CAD	8.08	88%	(5%)	8.0%	1,303	306	23.5%	(1.5%)	772	1,269	1.0x	4.1x	4.1x	8.8x	9.8x	1.6x
Dow	USD	55.88	96%	2%	5.2%	45,485	6,255	13.8%	3.6%	39,651	50,988	1.1x	8.2x	6.8x	18.5x	13.0x	1.6x
LyondellBasell	USD	100.28	97%	5%	5.1%	40,382	5,311	13.2%	(7.6%)	32,752	37,474	0.9x	7.1x	6.5x	11.9x	10.1x	1.5x
Methanex	CAD	60.70	87%	(3%)	1.7%	3,721	785	21.1%	4.1%	3,024	4,717	1.3x	6.0x	5.3x	14.8x	10.2x	2.1x
Olin	USD	53.80	90%	(0%)	1.5%	7,063	1,301	18.4%	5.4%	6,595	9,131	1.3x	7.0x	5.7x	14.2x	8.7x	1.9x
Westlake	USD	138.71	95%	(1%)	1.2%	12,347	2,456	19.9%	2.1%	17,958	19,197	1.6x	7.8x	6.8x	19.5x	14.9x	0.7x
Mean			89%	(1%)	3.8%			16.9%	1.6%			1.1x	6.7x	5.6x	16.1x	10.5x	1.5x
Median			90%	(1%)	3.4%			18.4%	3.6%			1.1x	7.0x	5.7x	14.8x	10.1x	1.6x

Source: Company filings, Factset as of February 29th, 2024.

Advanced Materials and Chemicals

Trading Comparables

Diversified

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Diversified																	
Calumet	USD	15.54	78%	(13%)	n.a.	3,618	371	10.3%	(3.9%)	1,272	3,580	1.0x	9.6x	8.4x	n.m.	26.4x	5.5x
Celanese	USD	151.97	96%	(2%)	1.9%	11,217	2,718	24.2%	4.6%	16,590	27,946	2.5x	10.3x	9.3x	13.3x	10.9x	4.3x
Chemours	USD	19.67	50%	(38%)	5.3%	6,067	1,165	19.2%	4.8%	2,957	5,236	0.9x	4.5x	3.8x	5.4x	4.1x	2.1x
Covestro	EUR	50.30	92%	(5%)	0.9%	15,882	1,462	9.2%	3.9%	10,032	12,394	0.8x	8.5x	6.8x	49.9x	19.1x	1.5x
Eastman	USD	87.74	96%	(2%)	3.7%	9,447	1,805	19.1%	3.9%	10,380	14,756	1.6x	8.2x	7.5x	11.5x	9.8x	2.4x
Huntsman	USD	25.60	86%	2%	3.8%	6,256	516	8.3%	4.9%	4,477	5,475	0.9x	10.6x	7.5x	42.4x	15.4x	2.2x
Koppers	USD	56.62	97%	11%	n.a.	2,221	270	12.2%	2.9%	1,273	2,071	0.9x	7.7x	7.1x	12.1x	10.6x	2.9x
Rayonier	USD	3.39	42%	(16%)	n.a.	1,680	187	11.1%	3.5%	233	999	0.6x	5.3x	4.5x	n.m.	24.8x	3.7x
Solvay	EUR	23.50	21%	(15%)	9.9%	4,940	1,029	20.8%	(3.9%)	2,623	4,041	0.8x	3.9x	3.6x	6.4x	5.5x	1.7x
Trinseo	USD	4.50	20%	(46%)	0.9%	3,520	238	6.8%	(0.1%)	164	2,101	0.6x	8.8x	6.5x	n.m.	n.m.	8.5x
Mean			73%	(9%)	4.2%			14.9%	2.3%			1.1x	7.6x	6.5x	20.2x	14.1x	2.9x
Median			86%	(5%)	3.8%			12.2%	3.9%			0.9x	8.2x	7.1x	12.1x	10.9x	2.4x

Electronic Chemicals & Materials

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Electronic Chemicals																	
Element Solutions	USD	23.50	96%	2%	1.1%	2,440	526	21.6%	4.7%	5,778	7,455	3.1x	14.2x	13.1x	17.0x	14.8x	3.1x
EnPro	USD	155.82	93%	(1%)	n.a.	1,105	263	23.8%	5.5%	3,328	3,623	3.3x	13.8x	12.6x	21.1x	18.4x	1.1x
Entegris	USD	134.36	91%	12%	0.3%	3,498	1,022	29.2%	5.9%	20,442	24,571	7.0x	24.0x	19.8x	40.1x	29.3x	4.0x
Materion	USD	134.32	93%	3%	0.4%	1,768	245	13.9%	8.0%	2,841	3,264	1.8x	13.3x	11.8x	21.3x	18.2x	1.7x
Merck	EUR	157.80	89%	10%	1.4%	23,180	6,432	27.7%	3.8%	74,532	83,993	3.6x	13.1x	11.7x	18.3x	16.0x	1.2x
MKS Instruments	USD	122.76	91%	19%	0.7%	3,603	711	19.7%	5.6%	8,354	12,366	3.4x	17.4x	13.4x	28.2x	17.7x	5.5x
Rogers Corporation	USD	112.07	65%	(15%)	n.a.	885	133	15.0%	3.8%	2,111	1,998	2.3x	15.1x	11.9x	36.9x	24.2x	(0.8x)
Mean			88%	4%	0.8%			21.6%	5.4%			3.5x	15.8x	13.5x	26.1x	19.8x	2.3x
Median			91%	3%	0.7%			21.6%	5.5%			3.3x	14.2x	12.6x	21.3x	18.2x	1.7x

Fertilizers

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Fertilizers																	
CF Industries	USD	80.72	92%	2%	2.4%	5,972	2,472	41.4%	(4.6%)	15,278	18,844	3.2x	7.6x	8.1x	12.9x	13.6x	0.4x
Mosaic	USD	31.16	56%	(13%)	2.5%	12,319	2,525	20.5%	(6.3%)	10,111	12,569	1.0x	5.0x	5.0x	9.9x	9.5x	1.3x
Nutrien	CAD	70.84	63%	(5%)	3.9%	27,189	5,655	20.8%	(0.5%)	25,875	35,562	1.3x	6.3x	6.2x	13.2x	12.3x	1.8x
OCI	EUR	24.35	77%	(7%)	5.1%	5,182	1,528	29.5%	3.2%	5,582	8,582	1.7x	5.6x	5.2x	19.4x	15.5x	1.6x
Yara	NOK	330.00	67%	(9%)	5.0%	15,264	2,176	14.3%	0.4%	7,931	10,928	0.7x	5.0x	4.7x	10.6x	9.4x	1.4x
Mean			71%	(6%)	3.8%			25.3%	(1.5%)			1.6x	5.9x	5.9x	13.2x	12.1x	1.3x
Median			67%	(7%)	3.9%			20.8%	(0.5%)			1.3x	5.6x	5.2x	12.9x	12.3x	1.4x

Ingredients

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Diversified Ingredients																	
ADM	USD	53.11	61%	(26%)	3.6%	92,600	5,103	5.5%	(1.6%)	28,702	26,393	0.3x	5.2x	5.1x	9.1x	8.9x	0.6x
Bunge	USD	94.37	81%	(7%)	2.7%	56,416	2,616	4.6%	(1.9%)	13,779	16,570	0.3x	6.3x	6.4x	10.0x	9.6x	1.2x
Darling Ingredients	USD	42.31	59%	(15%)	n.a.	6,519	1,565	24.0%	(0.2%)	6,854	8,997	1.4x	5.8x	5.1x	11.5x	9.3x	2.7x
Ingredion	USD	117.63	99%	8%	2.7%	7,979	1,236	15.5%	0.0%	7,680	9,516	1.2x	7.7x	7.4x	12.2x	11.3x	1.4x
Tate & Lyle	GBP	6.01	72%	(9%)	3.5%	2,089	432	20.7%	(0.3%)	3,092	3,170	1.5x	7.3x	6.9x	10.5x	9.7x	0.6x
Mean			74%	(10%)	3.1%			14.1%	(0.8%)			0.9x	6.5x	6.2x	10.6x	9.8x	1.3x
Median			72%	(9%)	3.1%			15.5%	(0.3%)			1.2x	6.3x	6.4x	10.5x	9.6x	1.2x
Specialty Ingredients																	
Ashland	USD	93.64	89%	11%	1.8%	2,226	494	22.2%	3.6%	4,766	5,631	2.5x	11.4x	9.9x	19.7x	15.7x	1.7x
Corbion	USD	18.93	54%	(12%)	3.2%	1,494	191	12.8%	0.5%	1,125	1,754	1.2x	9.2x	7.6x	17.0x	12.3x	3.4x
Croda	GBP	47.66	67%	(6%)	2.3%	2,206	494	22.4%	4.4%	8,513	9,105	4.1x	18.4x	15.8x	31.5x	25.9x	1.2x
DSM-Firmenich	EUR	99.00	81%	8%	2.2%	13,719	2,134	15.6%	4.0%	28,329	30,682	2.2x	14.4x	12.5x	37.4x	28.0x	0.9x
Givaudan	CHF	3,707.00	95%	6%	1.9%	7,974	1,822	22.8%	3.2%	38,958	43,386	5.4x	23.8x	22.3x	34.8x	31.7x	2.4x
IFF	USD	75.50	77%	(7%)	2.3%	11,110	2,058	18.5%	0.4%	19,384	28,822	2.6x	14.0x	12.7x	20.4x	17.6x	4.5x
Kerry Group	EUR	81.14	81%	3%	1.6%	8,732	1,349	15.4%	2.5%	15,432	17,027	1.9x	12.6x	11.6x	17.7x	15.9x	1.2x
Sensient	USD	66.88	85%	1%	2.5%	1,502	253	16.8%	3.5%	2,868	3,509	2.3x	13.9x	12.9x	22.5x	20.4x	2.5x
Symrise	EUR	94.56	86%	(5%)	1.3%	5,318	1,082	20.3%	5.1%	14,303	16,281	3.1x	15.0x	13.7x	29.1x	25.4x	2.0x
Mean			78%	1%	2.2%			18.5%	2.7%			2.9x	14.8x	13.2x	25.5x	21.0x	2.2x
Median			81%	3%	2.2%			18.5%	3.2%			2.5x	14.0x	12.5x	20.4x	17.6x	1.7x
Bio-Ingredients																	
Novonesis	DKK	388.80	93%	5%	1.6%	3,163	1,100	34.8%	13.7%	23,399	24,239	7.7x	22.0x	20.2x	29.6x	26.4x	0.7x
Mean			93%	5%	1.6%			34.8%	13.7%			7.7x	22.0x	20.2x	29.6x	26.4x	0.7x
Median			93%	5%	1.6%			34.8%	13.7%			7.7x	22.0x	20.2x	29.6x	26.4x	0.7x

Advanced Materials and Chemicals

Trading Comparables

Industrial Gas

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Industrial Gas																	
Air Products and Chemicals	USD	234.04	76%	(15%)	3.1%	12,838	5,201	40.5%	4.6%	52,281	58,779	4.6x	11.3x	10.4x	18.6x	17.1x	1.9x
L'Air Liquide	EUR	187.90	97%	7%	1.8%	30,662	8,691	28.3%	4.2%	106,834	118,266	3.9x	13.6x	12.6x	27.1x	24.6x	1.1x
Linde	USD	448.82	96%	9%	1.2%	34,482	12,925	37.5%	5.5%	218,278	232,443	6.7x	18.0x	16.8x	29.0x	26.2x	1.1x
Mean			90%	0%	2.0%			35.4%	4.7%			5.1x	14.3x	13.3x	24.9x	22.6x	1.4x
Median			96%	7%	1.8%			37.5%	4.6%			4.6x	13.6x	12.6x	27.1x	24.6x	1.1x

Lithium

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Lithium																	
Albemarle	USD	137.85	54%	(5%)	1.2%	5,971	1,286	21.5%	(14.7%)	18,357	21,047	3.5x	16.4x	10.8x	28.9x	15.8x	2.5x
Arcadium Lithium	USD	5.49	76%	NA	n.a.	1,308	510	39.0%	43.5%	5,898	5,898	4.5x	11.6x	6.9x	29.7x	14.4x	0.1x
Lithium Power	AUD	0.54	95%	(2%)	n.a.	n.a.	n.a.	n.m.	n.m.	230	222	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Piedmont Lithium	USD	14.56	22%	(48%)	n.a.	114	14	11.9%	104.7%	284	65	0.6x	4.8x	1.1x	10.1x	4.3x	(5.3x)
Mean			62%	(18%)	1.2%			24.2%	44.5%			2.9x	10.9x	6.3x	22.9x	11.5x	(0.9x)
Median			65%	(5%)	1.2%			21.5%	43.5%			3.5x	11.6x	6.9x	28.9x	14.4x	0.1x

Multi-Industrial

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Multi Industrial																	
3M	USD	92.12	81%	(16%)	6.8%	31,986	8,744	27.3%	2.7%	51,320	61,656	1.9x	7.1x	6.7x	9.6x	8.9x	1.1x
DuPont	USD	69.19	88%	(10%)	2.2%	12,118	2,889	23.8%	2.8%	29,060	33,927	2.8x	11.7x	10.6x	20.1x	16.7x	1.7x
Honeywell	USD	198.73	94%	(5%)	2.2%	38,511	10,147	26.3%	5.4%	130,750	143,498	3.7x	14.1x	13.4x	20.0x	18.3x	1.2x
Illinois Tool Works	USD	262.15	98%	0%	2.1%	16,514	4,624	28.0%	3.1%	78,741	85,841	5.2x	18.6x	17.7x	25.9x	24.0x	1.5x
Parker-Hannifin	USD	535.45	98%	16%	1.2%	20,291	5,005	24.7%	4.5%	70,387	82,093	4.0x	16.4x	15.4x	21.1x	19.4x	2.3x
Mean			92%	(3%)	2.9%			26.0%	3.7%			3.5x	13.6x	12.7x	19.3x	17.5x	1.6x
Median			94%	(5%)	2.2%			26.3%	3.1%			3.7x	14.1x	13.4x	20.1x	18.3x	1.5x

Specialty

Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
Specialty																	
Avient	USD	40.48	95%	(3%)	1.9%	3,222	523	16.2%	3.9%	3,721	5,285	1.6x	10.1x	9.2x	16.0x	13.7x	2.9x
Balchem	USD	157.19	99%	6%	n.a.	965	253	26.2%	5.0%	5,140	5,382	5.6x	21.3x	19.6x	36.8x	32.8x	1.0x
Ecobat	USD	224.84	99%	13%	1.0%	16,032	3,473	21.7%	4.9%	64,891	72,517	4.5x	20.9x	19.3x	35.1x	30.9x	2.1x
Ecovyst	USD	9.65	78%	(1%)	n.a.	752	270	35.9%	7.5%	1,160	1,503	2.0x	5.6x	5.1x	10.9x	8.5x	2.9x
EMS-CHEMIE	CHF	616.50	77%	(9%)	2.9%	2,529	683	27.0%	4.2%	16,375	15,687	6.2x	23.0x	20.7x	31.5x	28.3x	(1.0x)
Hexcel	USD	74.46	94%	1%	0.8%	1,987	406	20.4%	11.5%	6,388	6,880	3.5x	16.9x	14.2x	33.4x	25.1x	1.2x
Ingevity	USD	45.68	58%	(3%)	n.a.	1,451	379	26.1%	(4.5%)	1,683	2,861	2.0x	7.5x	6.5x	12.6x	9.1x	3.3x
Innospec	USD	124.27	97%	1%	n.a.	1,986	248	12.5%	2.8%	3,160	2,959	1.5x	11.9x	11.0x	18.5x	16.9x	(0.8x)
Minerals Technologies	USD	72.36	98%	1%	0.6%	2,264	400	17.7%	4.5%	2,369	3,138	1.4x	7.8x	7.3x	12.3x	10.7x	1.7x
Elementis	GBP	1.41	96%	11%	2.9%	739	156	21.1%	3.6%	1,050	1,248	1.7x	8.0x	7.5x	13.9x	12.5x	1.3x
Perimeter Solutions	USD	6.08	72%	32%	n.a.	444	165	37.3%	21.0%	886	1,500	3.4x	9.1x	8.3x	23.6x	17.5x	3.7x
Stepan	USD	89.20	85%	(6%)	1.7%	2,379	248	10.4%	5.0%	2,015	2,540	1.1x	10.2x	8.3x	30.3x	18.7x	2.1x
Syensqo	EUR	82.61	75%	(12%)	2.0%	7,544	1,699	22.5%	3.2%	9,465	13,392	1.8x	7.9x	7.2x	12.4x	10.7x	2.4x
Venator	USD	977.50	1%	(32%)	n.a.	n.a.	n.a.	n.m.	n.m.	768	1,603	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Mean			87%	3%	1.7%			23.7%	5.9%			2.8x	12.1x	10.9x	22.0x	18.0x	1.8x
Median			94%	1%	1.7%			21.7%	4.9%			2.0x	10.1x	8.3x	18.5x	16.9x	2.1x

Synthetic Biology

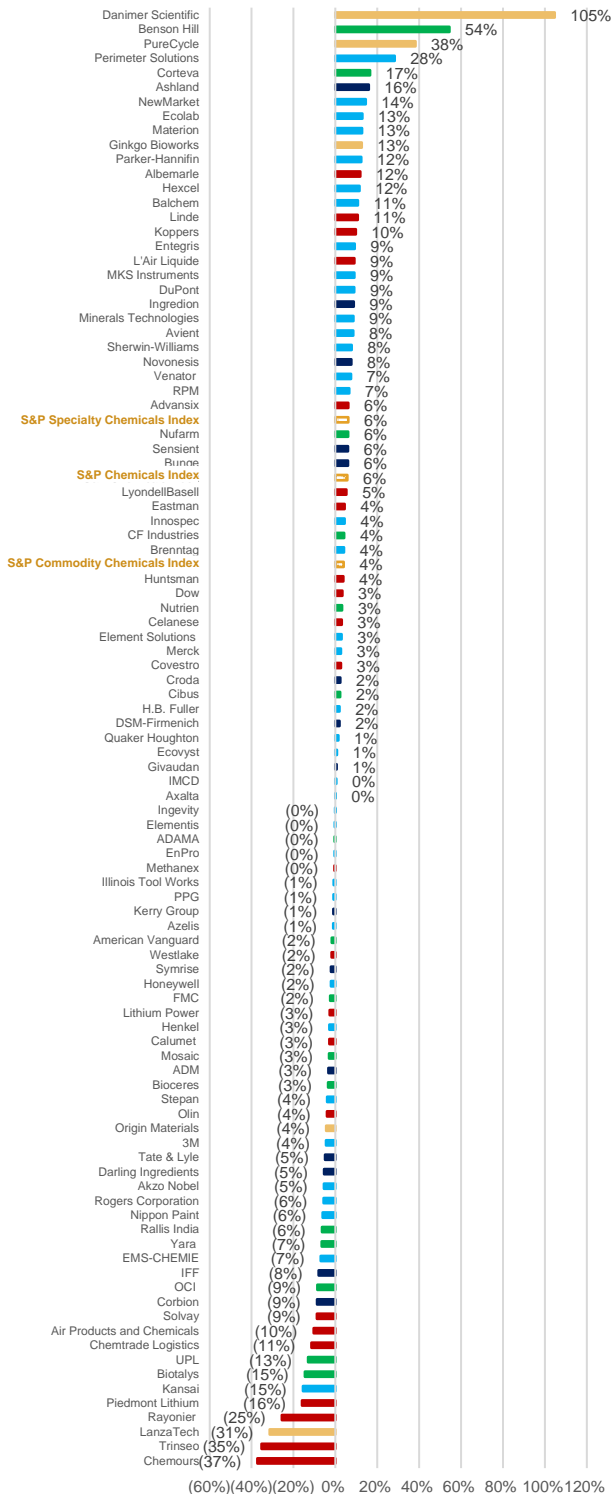
Company	Local Currency	Local Price as of 29-Feb-2024	% of 52 week high	Price Return YTD	Dividend Yield	Sales 2024E	EBITDA 2024E	EBITDA Margin 2024E	Sales CAGR 2023E-2025E	Equity Value	Enterprise Value	EV/Sales 2024E	EV/EBITDA 2024E	2025E	Price/Earnings 2024E	2025E	Net Leverage 2024E
SynBio																	
Ginkgo Bioworks	USD	1.52	60%	(10%)	n.a.	280	(393)	n.m.	24.1%	3,566	2,617	9.4x	n.m.	n.m.	n.m.	n.m.	2.4x
LanzaTech	USD	3.22	37%	(36%)	n.a.	176	(50)	n.m.	112.5%	676	548	3.1x	n.m.	n.m.	n.m.	n.m.	2.5x
Mean			48%	(23%)	NA			NA	68.3%			6.2x	NA	NA	NA	NA	2.4x
Median			48%	(23%)	NA			NA	68.3%			6.2x	NA	NA	NA	NA	2.4x

Appendix

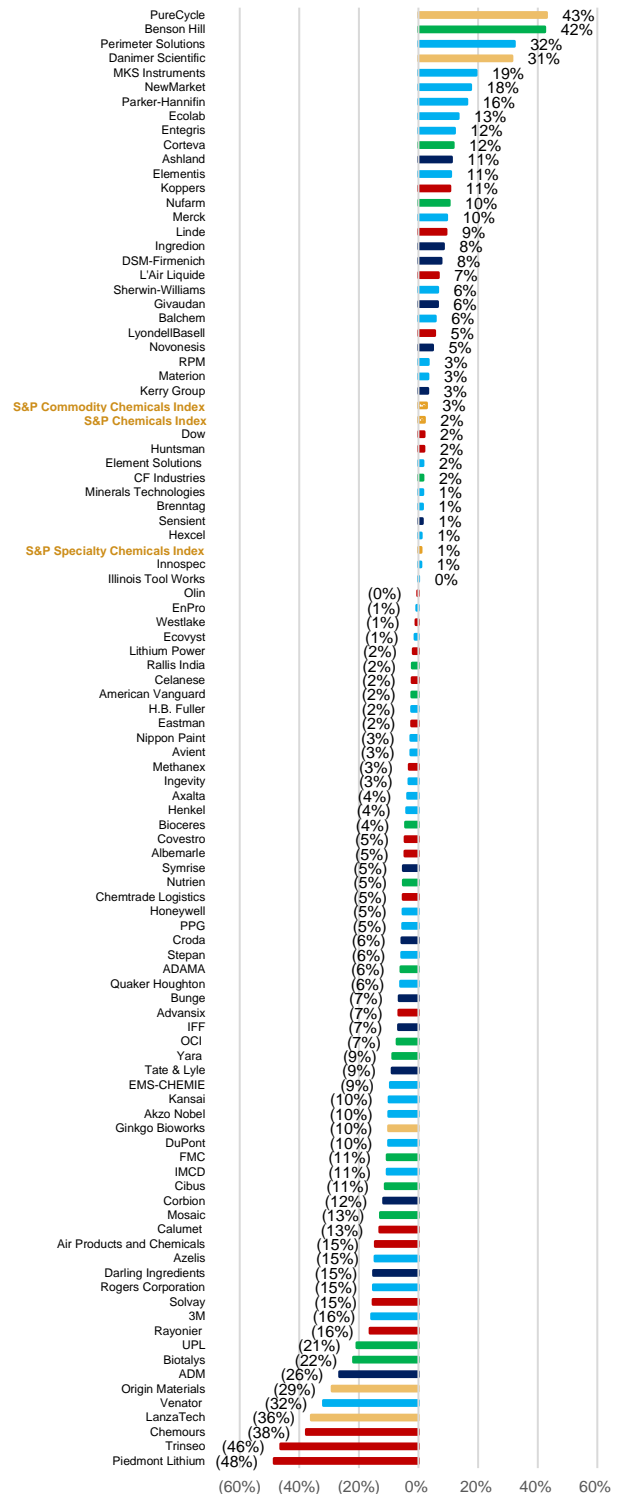
Advanced Materials and Chemicals

Share Price Performance

1 Month



Year-to-Date



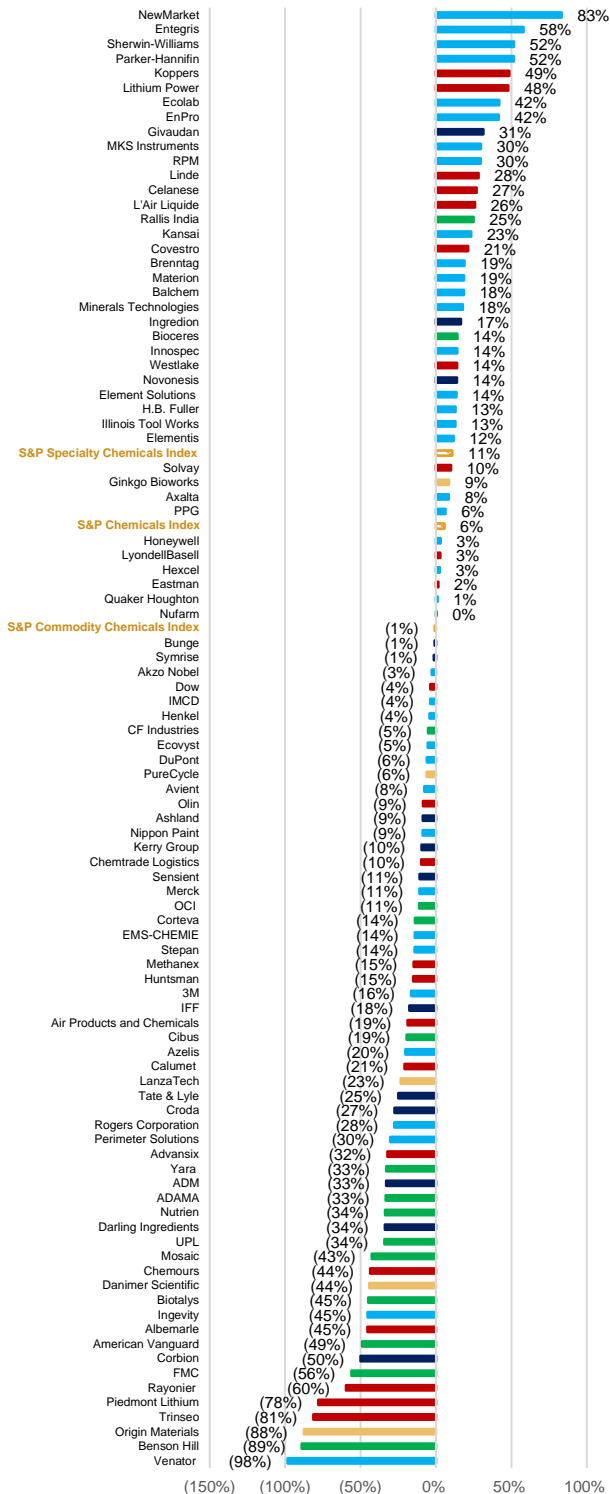
● Agriculture Chemicals ● Commodity & Diversified ● Chemicals Technology ● Ingredients ● Specialties ● Indices

Source: Factset as of February 29th 2024, third-party providers.

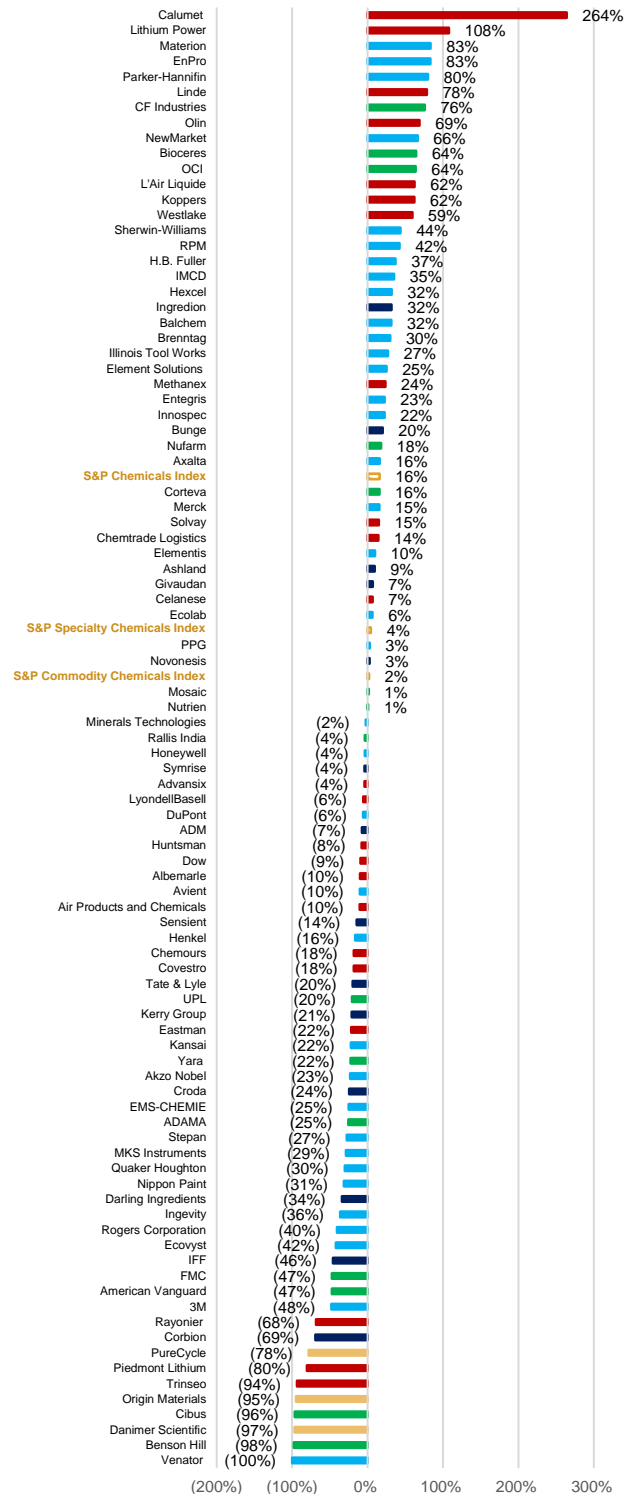
Advanced Materials and Chemicals

Share Price Performance

1 Year



3 Years



● Agriculture Chemicals ● Commodity & Diversified ● Chemicals Technology ● Ingredients ● Specialties ● Indices

Source: Factset as of February 29th 2024, third-party providers.

Disclaimer

This document has been prepared by Nomura Securities International, Inc. ("Nomura") for informational purposes only and is not a product of Nomura's or its affiliates' Research Departments. This material is for the intended recipient and cannot be redistributed, retransmitted or reproduced without written permission from Nomura. Unless otherwise specified, the source for all graphs, charts, and other information is Nomura. Nomura's databases are derived from various internal and external sources. We do not represent that the information provided herein is accurate or complete and it should not be relied upon as such. Past performance is not indicative of future results. Opinions expressed herein are subject to change without notice. All levels, prices and spreads are historical and do not represent current market levels, prices or spreads, some or all of which may have changed since the issuance of this document. Under no circumstances should this document be used or considered as an offer to sell or a solicitation of an offer to buy any financial instrument mentioned in it. The financial instruments mentioned in this document may not be eligible for sale in some states or countries, or suitable for all types of investors; their value and the income they produce may fluctuate and/or be adversely affected by exchange rates, interest rates or other factors. Certain financial instruments securities may be subject to call features or other redemption features, or may be eligible for redemption in whole or in part before maturity. Any such occurrences may affect yield. Clients are advised to make an independent review regarding the economic benefits and risks of purchasing or selling the financial instruments mentioned in this document and reach their own conclusions regarding the legal, tax, accounting and other aspects of any transaction in the financial instrument in relation to their particular circumstances.

Nomura and/or its affiliated companies may make a market or deal as principal in the financial instruments mentioned in this document or in options or other derivatives based thereon. In addition, Nomura, its affiliated companies, and/or its or their respective shareholders, directors, officers and/or employees, including persons involved in preparation or issuance of this material, may from time to time have long or short positions in such financial instruments or in options, futures, or other derivative instruments based thereon. One or more directors, officers, and/or employees of Nomura or its affiliated companies may be a director of the issuer of the financial instruments mentioned in this document. Nomura or its affiliated companies may have managed or co-managed a public offering of securities for any issuer mentioned in this document within the last three years.

"Nomura Greentech" is the marketing name that refers to the division in Nomura's investment banking department that provides products and services to clients in the sustainable technology and infrastructure sectors. All activities of Nomura Greentech in the U.S. are conducted by Nomura Securities International, Inc., a broker-dealer registered with the SEC and member SIPC. Elsewhere, services of Nomura Greentech are conducted by locally registered and/or regulated Nomura entities unless otherwise disclosed or notified. (Please contact us for details of our registrations and licenses in your location). Nomura has policies and guidelines designed to preserve the independence of research analysts. Such policies prohibit, among other things, investment banking employees from offering research coverage, a favorable research rating or a specific price target, or offering to change a research rating or price target, as consideration or inducement to obtain investment banking business.

For registered transactions where a prospectus is available, please call (212) 667-9000 or write to Nomura Securities International, Inc., Worldwide Plaza, 309 West 49th Street, New York, NY 10019- 7316 to obtain a prospectus. A registration statement relating to certain of these securities may have been filed with the Securities and Exchange Commission but may not yet be effective; in such case, these securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. For offerings pursuant to Rule 144A of the Securities Act of 1933 (the "Securities Act"), these securities have not been registered under the Securities Act and may not be offered or sold in the United States absent registration or an applicable exemption.

Nomura Securities International, Inc. is a registered broker-dealer and, member, SIPC.