

CHEMICALS & PLASTICS NEWSLETTER

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To all of our clients and prospects, it's been great meeting with you in person again; we look forward to continuing our discussions throughout 2022. We hope that you find the newsletter to be a useful tool for your day-to-day activities, and we're happy to provide customized data requests as well. Please don't hesitate to reach out. In this issue of PNC's *Chemicals & Plastics Newsletter*, we highlight the second quarter 2022 market activity and provide insight into the trends that defined the quarter.

RECENT HEADLINES

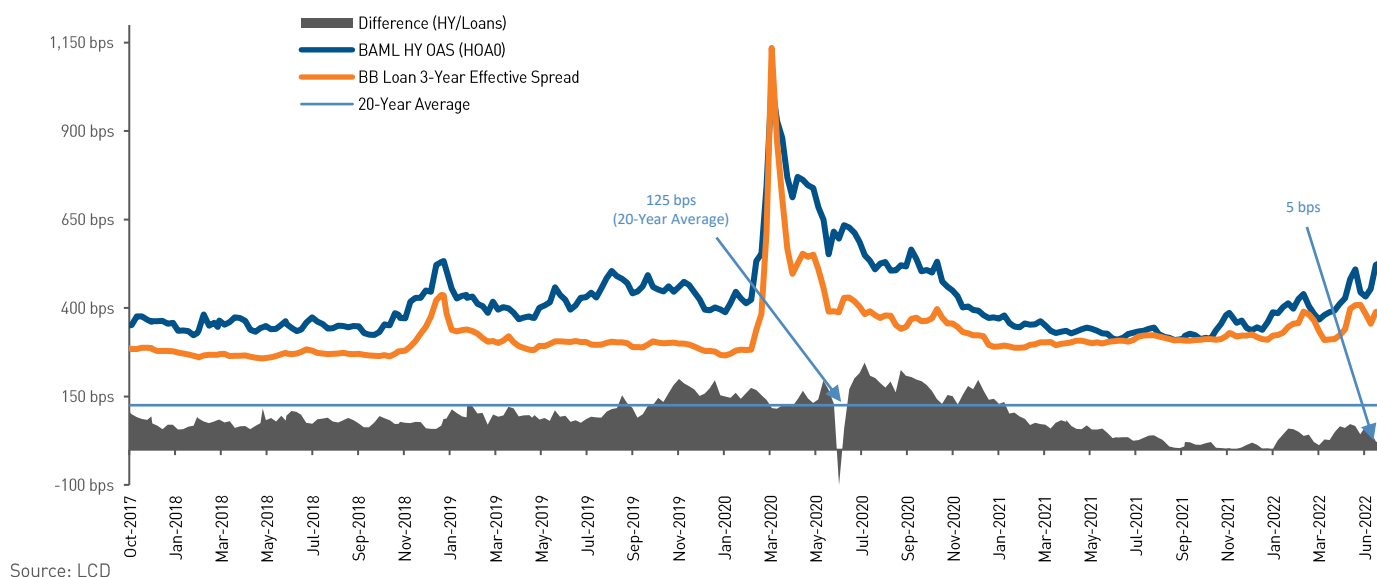
The constantly evolving regulatory landscape can be challenging to follow, whether it's rules handed down by the U.S. Environmental Protection Agency (EPA), disclosure requirements from the U.S. Securities and Exchange Commission (SEC) or piecemeal state bans on single-use plastics. In the last edition of *Chemicals & Plastics*, we noted the SEC's greenhouse gas (GHG) disclosure proposal, but on June 30, 2022, the U.S. Supreme Court issued a ruling limiting the EPA's ability to develop rules with "vast economic and political significance" without "clear congressional authorization." The ruling in *West Virginia v. EPA* pushes broad reaching regulation decisions back to Congress, which will need to "speak clearly if it wishes to assign an agency decisions" of this magnitude.¹ Many believe the court's ruling will limit the SEC's ability to enact its proposed GHG disclosure requirements without clear congressional authorization to do so. It remains to be seen what other regulations could be challenged under the ruling, but it could make federal rules easier to track, prepare for and influence as they make their way through Congress.

In addition to GHG emissions, single-use plastics have come under major regulatory scrutiny in recent years. While federal regulation related to these products will seemingly require congressional authorization going forward, state legislatures continue to limit the use of these products. Some states have banned single-use plastic bags, some have set recycled content targets and still other states have instituted their own Extended Producer Responsibility (EPR) systems. On June 30, 2022, California became the latest state to pass a law creating an EPR system. California's law will require producers of the materials covered by the legislation to establish a producer responsibility organization (PRO) that will have the responsibility of carrying out the requirements of the law and will be overseen by the California Department of Resources Recycling and Recovery. Among other responsibilities, the PRO will ensure that all plastic materials covered by the law meet certain recycling rates (30% by 2028 and 65% by 2032), meet certain source reduction targets, and pay \$500,000,000 each year from 2027 to 2037 to the California Plastic Pollution Mitigation Fund.² Colorado, Maine and Oregon have also passed EPR laws, each with differing scopes and structures. As additional EPR laws are put in place (New York and Maryland have debated, but failed to pass EPR systems), the challenge for producers will be to understand and comply with the varying laws of each state—a challenge that could drive a push for a federal solution.

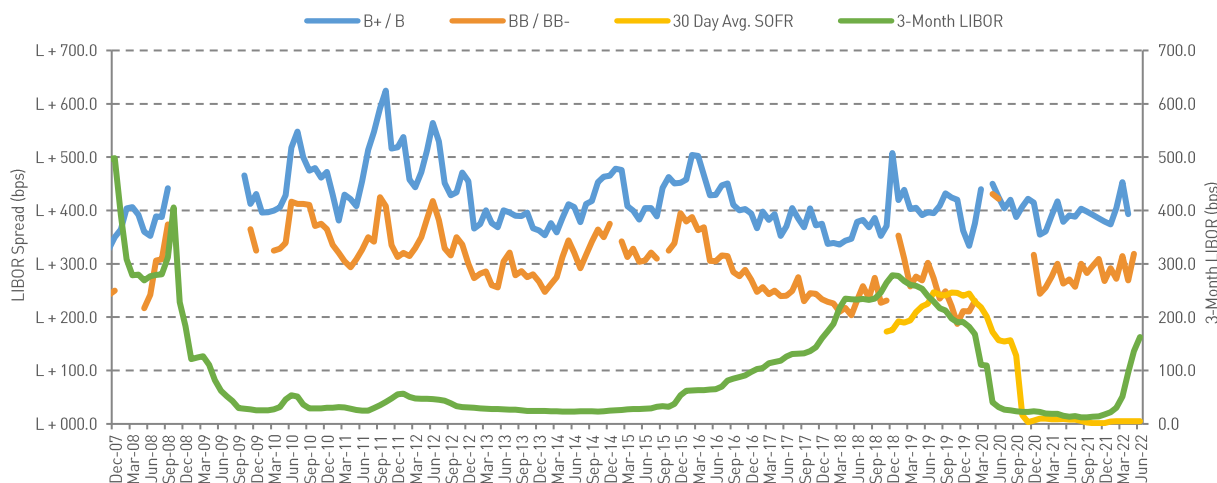
PRICING AND VOLUME UPDATE

- U.S. loan funds posted a net outflow of \$959.3 million for the week ended June 29, according to Lipper, marking the third consecutive week of net outflows for an aggregate \$4.2 billion over that span. Moreover, outflows have now been reported in 6 of the last 8 weeks, for a total of \$7.7 billion over that span. With this week's result, the 4-week moving average is for an outflow of \$1.03 billion, the deepest deficit since the week ended April 8, 2020.
- High-yield issuance continued to spiral lower in the second quarter from peak levels last year, as borrowing costs gapped higher, refinancing scope narrowed, and investors recoiled from the specter of a possible recession engineered by a belatedly hawkish Fed. The stark differentials year-over-year include the lowest total for second-quarter issuance since 2005, LCD data show.

HY Spread Less BB Loans

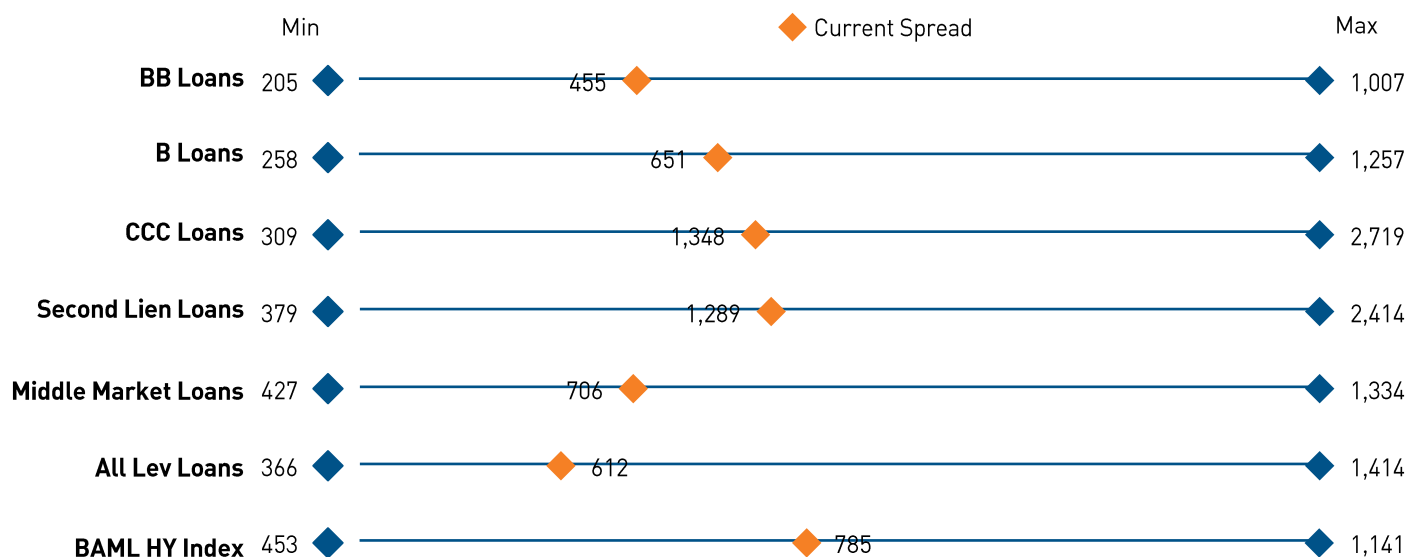


Institutional Loan LIBOR Spreads



PRICING AND VOLUME UPDATE *(Continued)*

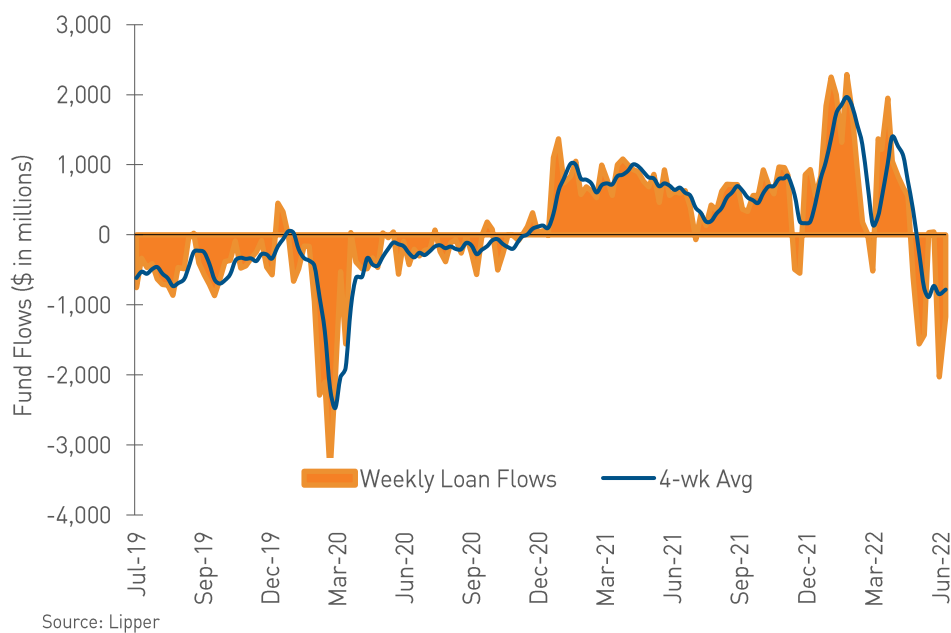
Average Secondary Loan Spreads Over LIBOR (2013 to Current)



Loan spreads assume a 3-year life.
Graph not to scale.

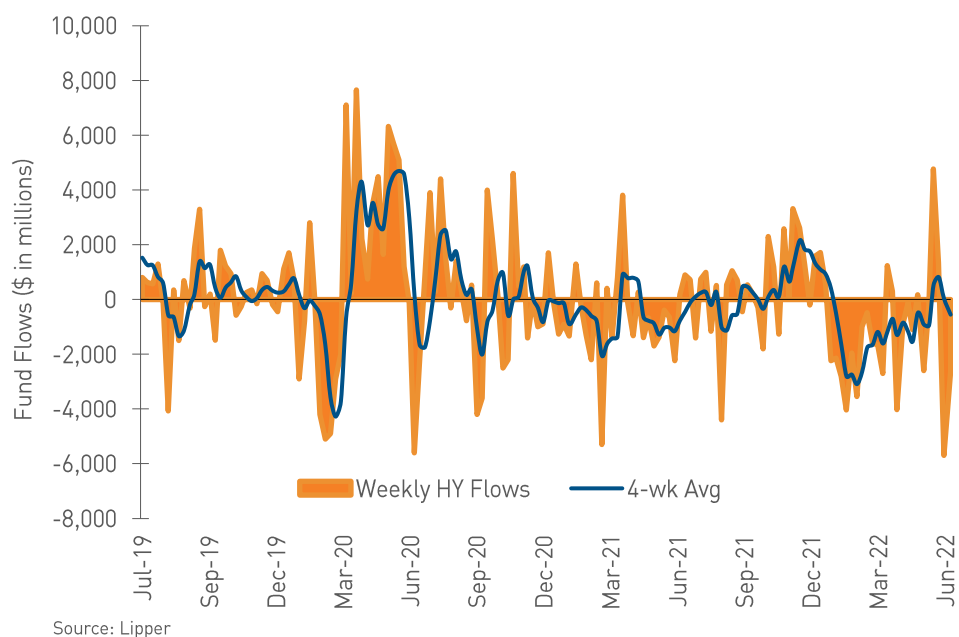
Source: LCD

Loan Fund Flows



PRICING AND VOLUME UPDATE *(Continued)*

HY Fund Flows



SECOND QUARTER LENDING ACTIVITY

Date	Company	Tranche Size (Ms)	Tranche Type	Spread	Term (Years)	Rating
6/24/22	Ingevity Corp.	\$1,000	Revolver	S+125	5	- / -
		\$375	TLA	L+125	1	- / -
		\$375	TLA	L+75	1	- / -
6/22/22	Shepherd Material Science Co	\$75	Revolver	S+125	5	- / -
6/21/22	Syngenta Group Co Ltd	CNY 1,800	TL	-	1	- / -
6/17/22	Koppers Inc	\$800	Revolver	S+175	5	Ba3 / -
6/9/22	Westlake Chemical	\$1,500	Revolver	S+125	5	- / -
5/28/22	Mitsubishi Gas Chemical Co Inc	JPY 10,000	Revolver	-	1	- / -
5/26/22	Advanced Drainage Systems	\$436	TLB	S+175	5	- / -
		\$600	Revolver	S+175	5	Baa3 / -
5/20/2022	Huntsman International LLC	\$1,200	Revolver	S+137.5	5	- / -
4/26/2022	Syngenta Group (HK) Holding Co Ltd	\$4,500	TL	S+92	3	- / -
4/14/2022	Eastman Chemical Co	\$500	DDTL	S+112.5	5	- / -
4/13/2022	Colorcon Inc	\$200	TLA	S+112.5	5	- / -
		\$200	TLA	S+125	5	- / -
		\$600	Revolver	S+112.5	5	- / -
4/12/2022	DuPont De Nemours Inc	\$1,000	364-Day	S+112.5	1	- / -
		\$2,500	Revolver	S+112.5	5	- / -
4/12/2022	BASF AG	€ 3,000	Revolver	-	1	- / -
4/9/2022	Asahi Kasei Corp	JPY 50,000	Revolver	-	2	- / -
4/7/2022	OCI NV	\$1,100	Revolver	S+110	5	- / -
4/6/2022	Johnson Matthey Plc	£400	Other	-	-	- / -
4/6/2022	Albaugh LLC	\$750	TLB	S+375	7	- / -
		\$200	Revolver	S+725	5	- / -
4/4/2022	Tronox Inc	\$400	TLB	S+325	7	Ba2 / BB
3/31/2022	DIC Corp	JPY 10,000	TL	-	7	- / -
3/31/2022	Compagnie Financiere et de Participations Roullier SA	€350	Revolver	-	5	- / -
3/28/2022	POLIFILM GmbH	€60	Schuldschein	-	5	- / -
3/28/2022	Nippon Chemical Industrial Co Ltd	JPY 7,290	Revolver	-	3	- / -
3/23/2022	Lotte Chemical Corp	\$2,400	Revolver/TL	-	15	- / -
3/18/2022	Celanese US Holdings LLC	\$1,500	Bridge Loan	S+125	1	- / -
		\$9,500	Bridge Loan	S+125	1	- / -
		\$1,000	DDTL	S+150	5	- / -
		\$1,750	Revolver	E+137.5	5	- / -
		\$500	DDTL	S+137.5	1	- / -
3/16/2022	Kamin LLC	\$75	Revolver	S+275	5	- / -
		\$250	DDTL	S+275	5	- / -

Source: LoanConnector

SECOND QUARTER BOND ACTIVITY

Date	Company	Tranche Size (Ms)	Tranche Type	Spread	Term (Years)	Rating
6/7/22	Cabot Corp	\$400	5.000%	T+212.5	10	Baa2 / BBB
5/10/22	Albemarle Corp	\$650	4.650%	T+175	5	Baa3 / BBB
5/10/22	Albemarle Corp	\$600	5.050%	T+210	10	Baa3 / BBB
5/10/22	Albemarle Corp	\$450	5.650%	T+255	30	Baa3 / BBB
4/11/22	Bayport Polymers LLC	\$350	4.743%	T+195	5	Baa1 / BBB+
4/11/22	Bayport Polymers LLC	\$300	5.140%	T+235	10	Baa1 / BBB+

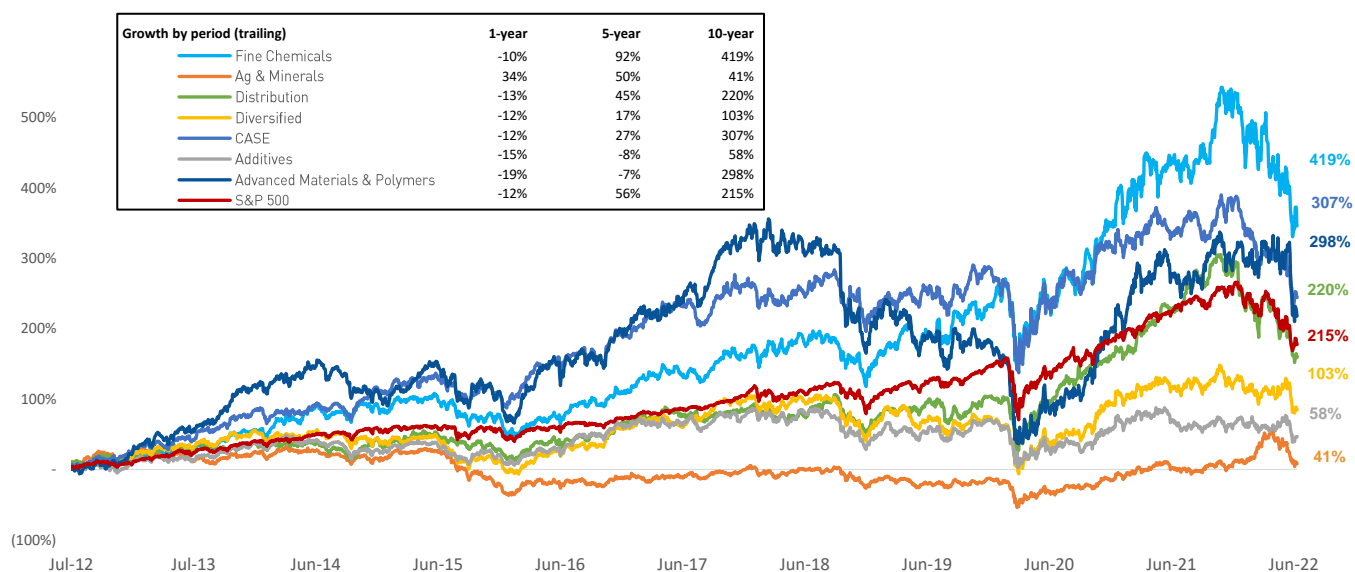
Source: PNC Debt Capital Markets

PUBLIC TRADING DATA

		Stock	Market	Enterprise	LTM			EV / LTM	Consensus 2022E		Net	Net Debt /	LTM FCF
Company	Ticker	Price	Cap.	Value	Revenue	EBITDA	EBITDA %	EBITDA	EBITDA	EV/EBITDA	Debt	LTM EBITDA	Conversion
Fine Chemicals (Pharma, F&B, Electronic Chem.)													
Balchem	BCPC	\$129.74	\$4,167	\$4,240	\$842	\$184	21.8%	23.1x	\$208	20.3x	\$73	0.4x	77.5%
Cabot Microelectronics	CCMP	\$174.49	\$4,992	\$5,666	\$1,263	\$366	29.0%	15.5x	\$370	15.3x	\$673	1.8x	87.9%
Element Solutions	ESI	\$17.80	\$4,409	\$6,116	\$2,530	\$483	19.1%	12.7x	\$588	10.4x	\$1,688	3.5x	90.2%
Entegris	ENTG	\$92.13	\$12,519	\$13,166	\$2,436	\$747	30.7%	17.6x	\$855	15.4x	\$647	0.9x	66.3%
International Flavors & Fragrances	IFF	\$119.12	\$30,356	\$42,274	\$12,417	\$2,822	22.7%	15.0x	\$2,572	16.4x	\$11,785	4.2x	84.7%
Sensient	SXT	\$80.56	\$3,386	\$3,891	\$1,376	\$225	16.4%	17.3x	\$254	15.3x	\$505	2.2x	73.7%
Fine Chemicals Median			\$4,701	\$5,891	\$1,906	\$424	22.3%	16.4x	\$479	15.4x		2.0x	81.1%
Ag & Minerals													
AgroFresh	AGFS	\$1.79	\$94	\$462	\$167	\$60	35.7%	7.8x	\$65	7.2x	\$208	3.5x	93.0%
American Vanguard	AVD	\$22.35	\$689	\$794	\$590	\$69	11.6%	11.6x	\$75	10.6x	\$106	1.5x	85.5%
CF Industries Holdings	CF	\$85.73	\$17,883	\$21,719	\$8,358	\$4,532	54.2%	4.8x	\$6,393	3.4x	\$1,085	0.2x	88.8%
Compass Minerals International	CMP	\$35.39	\$1,209	\$2,086	\$1,161	\$170	14.6%	12.3x	\$187	11.1x	\$877	5.2x	41.7%
CVR Partners	UAN	\$99.85	\$1,055	\$1,469	\$695	\$332	47.8%	4.4x	na	na	\$413	1.2x	92.3%
FMC	FMC	\$107.01	\$13,477	\$17,060	\$5,200	\$1,372	26.4%	12.4x	\$1,420	12.0x	\$3,560	2.6x	90.9%
LSB Industries	LXU	\$13.86	\$1,241	\$1,649	\$657	\$254	38.7%	6.5x	\$428	3.9x	\$408	1.6x	85.3%
Minerals Technologies	MTX	\$61.34	\$2,022	\$2,819	\$1,925	\$345	17.9%	8.2x	\$372	7.6x	\$756	2.2x	74.7%
Mosaic	MOS	\$47.23	\$17,097	\$20,983	\$13,983	\$4,395	31.4%	4.8x	\$7,806	2.7x	\$3,734	0.8x	70.6%
Nutrien	TSX:NTR	\$79.59	\$43,875	\$55,304	\$29,868	\$7,126	23.9%	7.8x	\$15,259	3.6x	\$11,748	1.6x	73.7%
Ag & Minerals Median			\$1,632	\$2,453	\$1,543	\$338	28.9%	7.8x	\$428	7.2x		1.6x	85.4%
Diversified													
Albemarle	ALB	\$208.98	\$24,474	\$26,861	\$3,626	\$939	25.9%	28.6x	\$2,291	11.7x	\$2,178	2.3x	NM
Ashland	ASH	\$103.05	\$5,578	\$6,073	\$2,249	\$491	21.8%	12.4x	\$568	10.7x	\$495	1.0x	81.9%
Chemours	CC	\$32.02	\$4,978	\$7,788	\$6,673	\$1,179	17.7%	6.6x	\$1,538	5.1x	\$2,809	2.4x	72.6%
CSW Industrials	CSWI	\$103.03	\$1,615	\$1,940	\$626	\$135	21.5%	14.4x	\$125	15.5x	\$309	2.3x	88.4%
Eastman	EMN	\$89.77	\$11,565	\$16,494	\$10,781	\$2,305	21.4%	7.2x	\$2,150	7.7x	\$4,845	2.1x	75.0%
Ecolab	ECL	\$153.76	\$43,922	\$52,993	\$13,115	\$2,734	20.8%	19.4x	\$2,978	17.8x	\$9,047	3.3x	74.8%
Huntsman	HUN	\$28.35	\$5,948	\$7,296	\$9,005	\$1,243	13.8%	5.9x	\$1,539	4.7x	\$1,151	0.9x	74.8%
Ingevity	NGVT	\$63.14	\$2,447	\$3,542	\$1,454	\$428	29.5%	8.3x	\$459	7.7x	\$1,096	2.6x	73.3%
Koppers	KOP	\$22.64	\$479	\$1,354	\$1,730	\$181	10.5%	7.5x	\$230	5.9x	\$871	4.8x	30.0%
Olin Corp	OLN	\$46.28	\$7,027	\$9,978	\$9,453	\$2,664	28.2%	3.7x	\$2,764	3.6x	\$2,951	1.1x	92.6%
Ecovyst (fka PQ)	ECVT	\$9.85	\$1,366	\$2,145	\$664	\$156	23.4%	13.8x	\$268	8.0x	\$778	5.0x	62.6%
Schwelzer-Mauduit	SWM	\$0.28	\$449	\$671	\$1,043	\$239	22.9%	2.8x	\$232	2.9x	\$232	1.0x	94.8%
Tredegar	TG	\$10.00	\$335	\$455	\$878	\$82	9.3%	5.5x	na	na	\$120	1.5x	66.9%
Diversified Median			\$4,978	\$6,073	\$2,249	\$491	21.5%	7.5x	\$1,053	7.7x		2.3x	74.8%
CASE (Coatings, Adhesives, and Sealants)													
Axalta	AXTA	\$22.11	\$4,897	\$8,188	\$4,527	\$761	16.8%	10.8x	\$874	9.4x	\$3,246	4.3x	82.6%
Carlisle	CSL	\$238.61	\$12,299	\$14,936	\$5,366	\$1,005	18.7%	14.9x	\$1,410	10.6x	\$2,637	2.6x	85.5%
Chase Corporation	CCF	\$77.81	\$733	\$626	\$307	\$76	24.9%	8.2x	na	na	(\$107)	(1.4x)	95.9%
GCP Applied Technologies	GCP	\$31.28	\$2,315	\$2,244	\$985	\$120	12.2%	18.7x	\$133	16.9x	(\$73)	(0.6x)	69.4%
HB Fuller	FUL	\$60.21	\$3,201	\$5,104	\$3,574	\$456	12.8%	11.2x	\$543	9.4x	\$1,902	4.2x	74.9%
PPG Industries	PPG	\$114.34	\$27,006	\$34,021	\$17,229	\$2,185	12.7%	15.6x	\$2,733	12.4x	\$6,900	3.2x	77.8%
Quaker Houghton	KWR	\$149.52	\$2,678	\$3,475	\$1,806	\$244	13.5%	14.2x	\$261	13.3x	\$796	3.3x	89.2%
RPM International	RPM	\$78.72	\$10,194	\$12,860	\$6,468	\$787	12.2%	16.3x	\$865	14.9x	\$2,664	3.4x	73.8%
Sherwin-Williams	SHW	\$223.91	\$57,958	\$70,047	\$20,287	\$3,094	15.3%	22.6x	\$3,765	18.6x	\$12,089	3.9x	86.6%
CASE Median			\$4,897	\$8,188	\$4,527	\$761	13.5%	14.9x	\$869	12.9x		3.3x	82.6%
Distribution													
Azelis	ENXTBR:AZE	\$21.83	\$5,104	\$6,040	\$3,215	\$304	9.5%	19.8x	\$405	14.9x	\$991	3.3x	93.2%
Brenntag	XTRA:BNR	\$64.92	\$10,030	\$12,375	\$17,533	\$1,323	7.5%	9.4x	\$1,697	7.3x	\$2,395	1.8x	82.2%
Hawkins Inc.	HWKN	\$36.03	\$763	\$896	\$775	\$95	12.3%	9.4x	\$93	9.6x	\$133	1.4x	70.1%
IMCD	ENXTAM:IMCD	\$136.89	\$7,795	\$8,779	\$3,927	\$431	11.0%	20.3x	\$504	17.4x	\$1,069	2.5x	98.4%
Univar	UNVR	\$24.87	\$4,209	\$6,617	\$10,263	\$996	9.7%	6.6x	\$1,043	6.3x	\$2,409	2.4x	87.2%
Distribution Median			\$5,104	\$6,617	\$3,927	\$431	9.7%	9.4x	\$504	9.6x		2.4x	87.2%
Additives													
Cabot	CBT	\$63.79	\$3,600	\$4,870	\$3,881	\$627	16.2%	7.8x	\$715	6.8x	\$1,122	1.8x	68.6%
Innospec	IOSP	\$95.79	\$2,377	\$2,315	\$1,616	\$195	12.0%	11.9x	\$222	10.4x	(\$63)	(0.3x)	80.9%
NewMarket	NEU	\$300.96	\$3,086	\$3,912	\$2,452	\$366	14.9%	10.7x	na	na	\$826	2.3x	80.6%
Orion Engineered Carbons	OEC	\$15.53	\$943	\$1,732	\$1,671	\$259	15.5%	6.7x	\$334	5.2x	\$789	3.0x	8.9%
Stapan Company	SCL	\$101.35	\$2,267	\$2,636	\$2,484	\$278	11.2%	9.5x	\$320	8.2x	\$369	1.3x	21.8%
Tronox	TROX	\$16.80	\$2,618	\$5,048	\$3,646	\$900	24.7%	5.6x	\$1,079	4.7x	\$2,374	2.6x	64.8%
Venator	VNTR	\$2.08	\$224	\$1,190	\$2,318	\$141	6.1%	8.4x	\$230	5.2x	\$961	6.8x	44.7%
Additives Median			\$2,377	\$2,636	\$2,452	\$278	14.9%	8.4x	\$327	6.0x		2.3x	64.8%
Advanced Materials & Polymers													
Advansix	ASIX	\$33.44	\$940	\$1,273	\$1,787	\$300	16.8%	4.2x	\$383	3.3x	\$334	1.1x	78.8%
Avient (fka PolyOne)	AVNT	\$40.08	\$3,664	\$5,043	\$4,950	\$573	11.6%	8.8x	\$637	7.9x	\$1,363	2.4x	83.0%
Celanese	CE	\$117.61	\$12,738	\$16,729	\$9,277	\$2,627	28.3%	6.4x	\$2,787	6.0x	\$3,645	1.4x	80.5%
Hexcel	HXL	\$52.31	\$4,397	\$5,142	\$1,405	\$236	16.8%	21.8x	\$302	17.0x	\$745	3.2x	81.4%
Rayonier Advanced Materials	RYAM	\$2.62	\$167	\$884	\$1,441	\$111	7.7%	7.9x	\$139	6.3x	\$717	6.4x	NM
Trinseo	TSE	\$38.46	\$1,390	\$3,348	\$5,228	\$597	11.4%	5.6x	\$659	5.1x	\$1,957	3.3x	78.2%
Westlake Chemical	WLK	\$98.02	\$12,579	\$17,775	\$13,477	\$4,387	32.6%	4.1x	\$4,860	3.7x	\$4,625	1.1x	82.2%
Advanced Mat. & Poly. Median			\$3,664	\$5,043	\$4,950	\$573	16.8%	6.4x	\$637	6.0x		2.4x	80.9%
Overall Median			\$3,664	\$5,048	\$2,484	\$431	16.8%	9.4x	\$568	8.2x		2.3x	80.5%

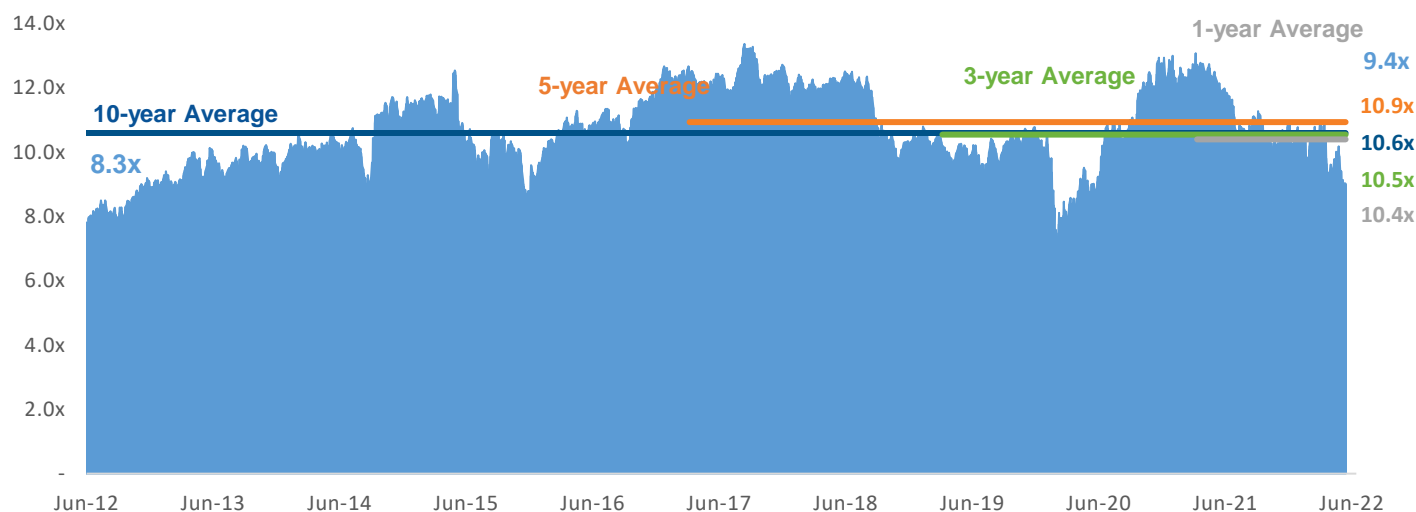
Source: S&P Capital IQ

SEGMENT PERFORMANCE



Segment Enterprise Value/LTM EBITDA Performance (10-Year)

Average as of:	1-year	3-year	5-year	10-year
June 30, 2017	11.6x	10.9x	10.2x	8.9x
June 30, 2012	7.6x	7.9x	7.6x	7.9x



Source: S&P Capital IQ

SECOND QUARTER 2022 CHEMICALS TRANSACTIONS

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
6/29/22	BioPhero (Novo Holdings)	FMC Corporation	\$200M	-	<ul style="list-style-type: none"> FMC Corporation has agreed to acquire BioPhero, a Denmark-based pheromone research and production company. Demonstrates FMC's continued commitment to investing in biologicals and adjacent technologies, expanding their portfolio while advancing sustainable agriculture.
6/28/22	Aubin Group (BGF Growth)	Italmatch Chemicals (Bain)	-	-	<ul style="list-style-type: none"> Italmatch Chemicals has acquired Aubin Group, a United Kingdom-based developer and supplier of chemical solutions to the oil and gas industry with manufacturing, stocking and office locations in the UK and various regions in the Middle East. Strengthens Italmatch Chemicals' position in the oil & gas and renewable energy sectors of key strategic markets such as the Middle East, the USA, and the North Sea.
6/28/22	Vitae Naturals	Kensing (One Rock Capital Partners)	-	-	<ul style="list-style-type: none"> Kensing has acquired Vitae Naturals, a Spain-based manufacturer of plant sterol esters and non-GMO natural vitamin E derivative products for the food, pharmaceutical, cosmetic and animal feed sectors. Complements and strengthens Kensing's footprint in Europe and enables further expansion in food ingredients.
6/23/22	Heinr. Propfe Chem. Fabrik	COMPO (Duke Street)	-	-	<ul style="list-style-type: none"> COMPO has acquired Heinr. Propfe Chem. Fabrik, a Germany-based business that develops and produces innovative fertilizers using natural and organic raw materials. Fits COMPO's defined sustainability strategy and makes a contribution to the expansion of their eco-sustainable product range.
6/23/22	Siemens Energy	Air Liquide	-	-	<ul style="list-style-type: none"> Air Liquide has formed a joint venture with Siemens Energy, a Germany-based fossil-fuel and renewable energy and electricity division of Siemens. The joint venture (JV) is dedicated to the series production of industrial scale renewable hydrogen electrolyzers in Europe.
6/23/22	Coregistics	Red Arts Capital	-	-	<ul style="list-style-type: none"> Red Arts Capital has acquired Coregistics, a Georgia-based contract packaging services provider. For Red Arts Capital, the deal comes on the heels of its most recent deal, the sale of the 104-year-old trucking company MME to trucking industry titan Knight-Swift, for \$150M.
6/23/22	Advantek, Inc. (Tinicum L.P.)	Cornell Capital LLC	-	-	<ul style="list-style-type: none"> Cornell Capital has agreed to acquire Advantek, a Minnesota-based provider of highly engineered carrier tape and associated protective packaging products. Advantek has 14 locations worldwide and an estimated \$150 million in annual sales.
6/22/22	SES Foam	Holcim	-	-	<ul style="list-style-type: none"> Holcim has agreed to acquire SES Foam, a Texas-based polyurethane spray foam insulation company. Expands Holcim's Solutions & Products business line and advances their "Strategy 2025 – Accelerating Green Growth." SES Foam is the biggest independent spray foam insulation company in the U.S. with 2022 (est.) Net Sales of USD 200 million.
6/22/22	Ocean Bio-Chem	OneWater Marine	\$125M	-	<ul style="list-style-type: none"> OneWater Marine has agreed to acquire Ocean Bio-Chem, a Florida-based manufacturer of appearance, performance, and maintenance chemicals and accessories for the marine, automotive, RV, and home care markets. Gives OneWater Marine access to a suite of iconic brands and consumable products and OBCI's strong customer relationships.
6/21/22	KeyVest Belgium S.A. (Holta Invest AS)	Elkem	-	-	<ul style="list-style-type: none"> Elkem has agreed to acquire KeyVest Belgium S.A., a Belgium-based company specializing in the sourcing of materials and production of metal powders to the refractory industry and other segments including advanced ceramics. Fits well into Elkem's offerings to the refractory market, enabling them to further grow by providing additional specialized products to current customers, improve service level and processing capabilities, and grow in adjacent segments.
6/21/22	Natural Polymers	Owens Corning	-	-	<ul style="list-style-type: none"> Owens Corning has agreed to acquire Natural Polymers, an Illinois-based manufacturer of spray polyurethane foam insulation for building and construction applications. Advances Owens Corning's strategy to strengthen their core building and construction products and expand their addressable markets into higher-growth segments.
6/20/22	All'Chem (Seche Environnement)	Speichim Processing	-	-	<ul style="list-style-type: none"> Speichim Processing has acquired All'Chem, a France-based production site of the company Axyntis, which specializes in the contract manufacturing of active molecules for the pharmaceutical and animal health industries. Complements the range of expertise offered by Speichim Processing, serving a wide range of European industrial customers, particularly in the pharmaceutical, chemical, cosmetics, agrochemical, petrochemical, and paint and ink sectors.

SECOND QUARTER 2022 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
6/15/22	MG Resins (Cornerstone Research Group, Inc)	Karman Space & Defense (Trive Capital)	-	-	<ul style="list-style-type: none"> Karman Space & Defense has acquired MG Resins, an Ohio-based family of resins that was developed by Cornerstone Research Group, Inc, an Ohio-based defense products and services firm. The family of resins were developed to address the growing need for ultra-high temperature materials with higher char yields, improved processability and reduced cycle times. The MG carbon-carbon technology, along with other CRG-developed resin systems, will serve as the launch point for Karman's broader move into advanced material sciences.
6/14/22	Kappa Bioscience AS (Verdane)	Balchem Corporation	\$338M	18.0x	<ul style="list-style-type: none"> Balchem has agreed to acquire Kappa Bioscience, a Norway-based manufacturer of specialty vitamin K2 for the human nutrition industry. Accelerates Balchem's strategy to expand their portfolio of science-based specialty nutrients with leading positions in growing markets.
6/14/22	Eberle Design Inc. (PPG Industries, Inc.)	Vance Street Management LLC	-	-	<ul style="list-style-type: none"> Vance Street Management has acquired Eberle Design, an Arizona-based developer, manufacturer and distributor of traffic control and access control products. PPG acquired EDI in December 2020, along with the Ennis-Flint business. Ennis-Flint remains the core of PPG's Traffic Solutions business unit and is not impacted by the sale of EDI.
6/9/22	Gross & Perthun GmbH	The Sherwin-Williams Company	-	-	<ul style="list-style-type: none"> The Sherwin-Williams Company has agreed to acquire Gross & Perthun GmbH, a Germany-based developer, manufacturer and distributor of coatings primarily for the heavy equipment and transportation industries. Brings Sherwin innovative waterborne and solvent liquid coatings technology, leading specification and approval positions, strong relationships with multinational and local customers, strategically located manufacturing, and a commercial and technical team focused on delivering innovative and value-added solutions.
6/7/22	Prodap Participacoes S/A	Koninklijke DSM N.V.	-	-	<ul style="list-style-type: none"> Koninklijke DSM N.V. has agreed to acquire Prodap Participacoes S/A, a Brazil-based animal nutrition and technology company that combines nutrition, consultancy and technology services to optimize ruminant farming operations. Complements DSM's animal nutrition knowledge and advisory capabilities with Prodap's extensive consultancy experience. DSM will take another step forward in its "precision & personalization journey" with this acquisition, since it will help to strengthen and further develop DSM's digital solutions to reach more markets globally and species, enabling smarter nutritional decision-making thanks to artificial intelligence and other tools.
6/3/22	Barrette Outdoor Living (Torquest Partners Fund)	CRH	\$1.9B	10.0x	<ul style="list-style-type: none"> CRH has agreed to acquire Barrette Outdoor Living, an Ohio-based maker of products including vinyl, aluminum and steel fences and railings, as well as composite decking. The Barrette acquisition follows the \$3.8 billion sale by CRH this year of its U.S.-based glass product manufacturing unit.
6/2/22	ACC BEKU – Herstellung und Vertrieb chemischer Spezialerzeugnisse GmbH	OQEMA	-	-	<ul style="list-style-type: none"> OQEMA has acquired ACC BEKU, a Germany-based company that specializes in manufacturing and bottling hardeners, lacquers and other chemicals. Represents a combination of two companies that both have 100+ years of experience and allows OQEMA to expand their range of services.
6/1/22	Cary Compounds, LLC	GEON Performance Solutions (SK Capital Partners)	-	-	<ul style="list-style-type: none"> GEON Performance Solutions has acquired Cary Compounds, a New Jersey-based PVC compounder. This acquisition represents GEON's second in acquisition in less than a year. GEON acquired Roscom, Inc. in December 2021.
6/1/22	Paints and coatings activities in Africa of Kansai Paint	AkzoNobel	-	-	<ul style="list-style-type: none"> AkzoNobel has agreed to acquire the paints and coatings activities in Africa of Kansai Paint, which is present in 12 countries in Africa and has roughly €280 million in sales. Helps AkzoNobel to further expand their paints and coatings business in Africa and provide a strong platform for future growth.
6/1/22	Everzinc Belgium Sa (OpenGate Capital, LLC)	U.S. Zinc Corporation (Aterian Investment Partners, LLC)	-	-	<ul style="list-style-type: none"> U.S. Zinc Corporation has acquired Everzinc Belgium Sa, a Belgium-based provider of specialty zinc materials. Through this acquisition, the new company will operate under the EverZinc name and will be the world's largest zinc specialty chemical company.

SECOND QUARTER 2022 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
6/1/22	Mura Technology Ltd. (18.5% stake)	KBR, Inc.	\$540.5M	-	<ul style="list-style-type: none"> KBR, Inc. has agreed to invest an additional \$100 million in Mura Technology bringing KBR's aggregate investment in Mura to 18.5%. Mura Technology is a UK-based company that offers plastic recycling services using HydroPRS, a technology that recycles plastics back into chemicals from which they were made. This investment provides Mura incremental capital to accelerate development of its plastics recycling projects and enables KBR to participate more fully in this sustainability-focused, high growth sector.
5/31/22	TENAX	Sun Capital Partners, Inc.	-	-	<ul style="list-style-type: none"> Sun Capital Partners has acquired TENAX, an Italy-based manufacturer of chemical products, abrasives and tooling for stone treatment. TENAX has roughly 220 employees with primary industrial and R&D operations located near Verona, Italy, and subsidiaries in the United States, Spain, Brazil, Turkey, India and China.
5/31/22	Firmenich International	Koninklijke DSM N.V.	\$20.7B	24.8x	<ul style="list-style-type: none"> Koninklijke DSM N.V. has agreed to merge with Firmenich International, a Switzerland-based developer, manufacturer and seller of fragrances and flavors. Integrates Firmenich's fragrance and flavors business with DSM's health and nutrition portfolio, with the new company to have dual headquarters in Kaiseraugst and Maastricht. The deal creates the world's largest flavors, fragrance and nutrition firm. Attractive annual run rate synergy potential of €350m Adj. EBITDA, including c. €500m annual sales uplift particularly from combining DSM's Food & Beverage and Firmenich's Taste & Beyond businesses, supporting double-digit EPS accretion DSM-Firmenich's headquarters will be in Switzerland and the Netherlands. It will have four main business units: food and beverage; perfumery and beauty; health, nutrition and care; and animal nutrition and health. The Netherlands-based food and beverage business will have combined revenues of 2.7 billion euros (\$2.9 billion), with capabilities in taste, nutrition and functionality.
5/31/22	Engineering Materials business of Koninklijke DSM N.V.	Advent International Corporation; LANXESS Aktiengesellschaft	\$4.1B	11.5x	<ul style="list-style-type: none"> Advent International Corporation; LANXESS Aktiengesellschaft will create an engineering plastics JV and have agreed to acquire the engineering materials business of DSM, one of the leading suppliers of engineering and high-performance polymers, which are used primarily in the automotive industry. The purchase of DSM's engineering materials business will be financed by the JV via equity from Advent and external debt. The combined company will have sales of about EUR 3 billion.
5/31/22	Aalterpaint (Kris Vercamer and Pascal Catteeuw)	Quva	-	-	<ul style="list-style-type: none"> Quva has acquired Aalterpaint, a Belgium-based specialist in industrial paints, ranging from fire-resistant and anti-corrosion paint to industrial coatings. Quva bought Creafund's stake and bought the rest of the shares, which were mainly owned by Kris Vercamer and Pascal Catteeuw. The duo had acquired Aalterpaint in 2015.
5/30/22	Fertinagro OCP Organic Biosolutions	OCP, Fertinagro Biotech	-	-	<ul style="list-style-type: none"> OCP has formed a joint venture with Fertinagro Biotech to manufacture and commercialize organic fertilizer for agriculture. The venture will be held in equal parts by both companies, although OCP owns a 20% stake in Fertinagro.
5/27/22	Pellicle business of Asahi Kasei	Mitsui Chemicals	\$58M	-	<ul style="list-style-type: none"> Mitsui Chemicals has agreed to acquire the pellicle business of Asahi Kasei. Photomask pellicles are used as protective covers for intricately patterned photomasks in the production of semiconductors. The pellicle assets will form part of Mitsui's Information and Communications Technology (ICT) Solutions segment.
5/27/22	Liquid Wrench, Gunk and TiteSeal brands of Blumenthal Brands Integrated, LLC	B'laster Holdings	-	-	<ul style="list-style-type: none"> B'laster Holdings has acquired the Liquid Wrench, Gunk and TiteSeal brands of Blumenthal Brands Integrated, LLC, a North Carolina-based manufacturer of lubricants and cleaners for marine fleets, offshore energy and heavy-duty equipment industries. Strengthens B'laster Holdings' portfolio of aftermarket automotive brands.
5/26/22	Neu Kimya Anonim Şirketi	Solenis (Sigura Water, Platinum Equity)	-	-	<ul style="list-style-type: none"> Solenis has acquired Neu Kimya Anonim Şirketi, a Turkey-based specialty chemicals manufacturer that serves the water treatment, oil and gas, geothermal, and mining industries in Turkey, southeastern Europe and the Middle East. Fits well with Solenis' direct-to-market strategy and will offer customers in the region improved product and service offerings.

SECOND QUARTER 2022 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
5/26/22	Cosmocel, S.A.	Rovensa, S.A. (Partners Group, Bridgepoint)	-	-	<ul style="list-style-type: none"> Rovensa has agreed to acquire Cosmocel, a Mexico-based company focusing in specialty biostimulants and high-tech products for agriculture. Positions Rovensa as a global leader in BioSolutions for sustainable agriculture and it is squarely aligned with its strategy to provide distributors and farmers with innovative solutions to increase land productivity and output profitability, whilst enabling farming in a sustainable and responsible way to protect and preserve the environment for future generations.
5/26/22	Eldorado Aviation Product Line (PPG Industries)	Cee-Bee® Aviation (McGean®)	-	-	<ul style="list-style-type: none"> Cee-Bee® Aviation has agreed to acquire the Eldorado Aviation Product Line, a PPG product line focused on aerospace coatings, pretreatments, and cleaners. Fits Cee-Bee®'s existing product line and Cee-Bee® intends to continue uninterrupted the manufacture, sales and service of products to Eldorado customers.
5/25/22	Johnson Matthey battery materials business in Canada.	Nano One	\$8.0M	-	<ul style="list-style-type: none"> Nano One has agreed to acquire the Canadian battery materials business of Johnson Matthey, which includes JMBM Canada's lithium iron phosphate (LFP) production facility at Candiac that has a capacity of 2,400 metric tons/year. The LFP plant was acquired by Johnson Matthey in 2015 and has been in operation since 2012. It supplies LFP cathode material to the lithium-ion battery sector for both automotive and nonautomotive applications for a select group of customers.
5/25/22	E-Lyte Innovations GmbH (28% stake)	Fuchs Petrolub	-	-	<ul style="list-style-type: none"> Fuchs Petrolub has acquired a 28% stake in E-Lyte Innovations, a Germany-based developer and producer of liquid electrolytes for high-performance batteries in the industrial and automotive sector. Helps Fuchs take advantage over the next few years of the opportunities presented by the megatrends of digitalization, sustainability and e-mobility.
5/25/22	Nylonbor (Boryszew)	Instytut Techniczny Wojsk Lotniczych (ITWL, Air Force Institute of Technology)	\$4.6M	-	<ul style="list-style-type: none"> Instytut Techniczny Wojsk Lotniczych has agreed to acquire Nylonbor, a Poland-based producer of modern construction polyamides used for the production of machine and device elements, as well as battlefield simulation devices for military applications. The target generated 2021 sales and EBITDA of PLN 12.6 million and PLN 1 million, respectively.
5/19/22	United Gilsonite Laboratories, Inc.	Sika AG	-	-	<ul style="list-style-type: none"> Sika has acquired United Gilsonite Laboratories, a Pennsylvania-based manufacturer of products for consumer and DIY waterproofing applications. Increases Sika's presence with major retailers and other building material stores by widening the offering and opening up cross-selling opportunities.
5/18/22	Electro Chemical Engineering and Manufacturing	Knight Material Technologies (High Street Capital)	-	-	<ul style="list-style-type: none"> Knight Material Technologies has acquired Electro Chemical Engineering and Manufacturing, a Pennsylvania-based company specializing in high-performance fluoropolymer-lined vessels. Creates a larger, complementary product offering that will drive expansion into new markets and industries.
5/17/22	Perstorp Holding AB (PAI Partners)	Petronas Chemicals International B.V.	\$2.5B	8.6x	<ul style="list-style-type: none"> Petronas Chemicals has agreed to acquire Perstorp Holding, a Sweden-based niche specialty chemicals player that develops sustainable solutions for the resins and coatings, engineered fluids and animal nutrition markets. Gives Petronas a leg up in the markets of the Asia Pacific region, providing scale to increase the pace of innovation and accelerate their sustainable transformation.
5/13/22	Yenkin-Majestic Paint Corporation's industrial paint business	Jamestown Coating Technologies	-	-	<ul style="list-style-type: none"> Jamestown Coating Technologies has acquired the industrial paint business of Yenkin-Majestic, producing coatings for the OEM market under the YM-Industrial brand. Represents a strategic fit for Jamestown Coating. This acquisition is the fourth in Jamestown Coating's 137-year history.
5/12/22	Valtris Specialty Chemicals, Inc. (H.I.G. Capital, LLC)	SK Capital Partners	-	-	<ul style="list-style-type: none"> SK Capital Partners has acquired Valtris Specialty Chemicals, an Ohio-based maker of polymer additives and specialty chemicals. SK has made several plastics materials-related acquisitions since 2009, most recently acquiring polystyrene and specialty chemicals maker Deltech Holdings LLC of Baton Rouge, La., in August 2021.
5/12/22	MPR Plastics Inc.	Thunderbird LLC	-	-	<ul style="list-style-type: none"> Thunderbird LLC has acquired MPR Plastics, an Illinois-based company that engages in high precision injection molding of plastic parts. Complements Thunderbird's high-volume plastic production capabilities at Impact Molding, an injection molder owned by Thunderbird in Elkhart, Ind.
5/12/22	Izolbet	Holcim	-	-	<ul style="list-style-type: none"> Holcim has agreed to acquire Izolbet, a Poland-based manufacturer of waterproofing materials, construction chemicals and polystyrene. Strengthens Holcim's footprint in the market for renovation, thermal insulation and finishing, and will complement Holcim's recent investment in a new production facility for dry mixes in Kraków.

SECOND QUARTER 2022 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
5/12/22	Ceramic businesses of Saint-Gobain in Brazil and the U.S.	Shinagawa Refractories Co., Ltd	-	-	<ul style="list-style-type: none"> Shinagawa Refractories has agreed to acquire the Brazilian Refractories Business and the Alumina-based wear-resistance ceramics business in the U.S. from Saint-Gobain. Represents a natural extension of Shinagawa's long-standing collaboration with Saint-Gobain in Brazil, whereby Shinagawa has been supplying technology for the manufacture of iron and steel refractory products.
5/12/22	Halon.US	A-Gas US (A-Gas International)	-	-	<ul style="list-style-type: none"> A-Gas US has acquired Halon.US, a California-based fire suppression business. Expands A-Gas's global Fire Suppression business and demonstrates their ongoing commitment to sourcing high-quality recovered material.
5/12/22	Global SFC and Monofrax LLC	Saint-Gobain	-	-	<ul style="list-style-type: none"> Saint-Gobain has acquired Global SFC, a South Korea-based nano-ceramic window film coatings company and Monofrax LLC, a New York-based fused cast refractories company. Expands Saint-Gobain's footprint in High Performance Solutions.
5/12/22	Protechnic (Bpifrance)	Bemis Associates	-	-	<ul style="list-style-type: none"> Bemis Associates has acquired Protechnic, a France-based manufacturer of hotmelt adhesives and plastic printed films. Allows Bemis to produce new products globally, specifically in the U.S., Europe and Asia where they have key manufacturing facilities.
5/12/22	Terra Circular	Braskem	-	-	<ul style="list-style-type: none"> Braskem has formed a joint venture with Terra Circular aiming to convert low-quality plastic waste into final products. Terra Circular will provide the JV all the shares in its subsidiary ER Plastics, which has a capacity to recycle 23,000 tons of plastic waste per year.
5/11/22	Trecora Resources	Balmoral Funds LLC	\$247M	11.4x	<ul style="list-style-type: none"> Balmoral Funds has agreed to acquire Trecora Resources, a Texas-based provider of hydrocarbons and specialty waxes. Allows Balmoral to help execute Trecora's growth plans. This is Balmoral's fourth acquisition in the chemicals sector. With the completion of the acquisition, Trecora's stock will cease trading on the New York Stock Exchange and Trecora will no longer be listed on any public market.
5/10/22	Hong-Kuang Hi-Tech (21.9% stake)	Air Water Inc	\$9.1M	-	<ul style="list-style-type: none"> Air Water has acquired a 21.9% stake in Hong-Kuang Hi-Tech, a Taiwan-based producer of electronic-grade bulk chemicals. Air Water plans to integrate two business domains, i.e., gas for semiconductor manufacturing and chemicals.
5/10/22	Cyco Nutrients	The Scotts Miracle-Gro Company	\$34M	-	<ul style="list-style-type: none"> The Scotts Miracle-Gro Company has acquired Cyco Nutrients, an Australia-based brand of hydroponic nutrients, plant additives and growing media used by commercial and domestic growers. Expands Scotts' nutrients and growing media line as well as the availability of the Cyco brand in North America.
5/9/22	Cedar Poly LLC	UFP Industries Inc.	\$17M	-	<ul style="list-style-type: none"> UFP Industries has acquired Cedar Poly LLC, an Iowa-based recycling firm. Gives UFP the ability to support their composite decking business, Deckorators Inc., by obtaining a source of recycled plastics.
5/6/22	Baobab Mining and Chemicals Corporation SA (45% stake; Baobab Fertilizer Africa)	Parry Chemicals Limited (Coromandel International)	\$43.6M	-	<ul style="list-style-type: none"> Parry Chemicals has agreed to acquire a 45% stake in Baobab Mining and Chemicals Corporation, a Senegal-based rock phosphate mining company. Helps to strengthen backward integration and ensure long-term supply security of the raw material. At full capacity, BMCC can meet up to one-third of Parry Chemical's rock phosphate requirement.
5/5/22	Hi-Tech Industries (Niteo Products LLC; Highlander Partners)	MPE Partners	-	-	<ul style="list-style-type: none"> MPE Partners has acquired Hi-Tech Industries, a Michigan-based car care accessories firm. MPE's investment returns Hi-Tech to a standalone platform and positions the company for accelerated growth in the large and expanding automotive aftermarket, including professional detailing and automotive collision / body shop segments.
5/4/22	Solvay Soda Ash Joint Venture (AGC) (20% stake)	Solvay	\$600M	-	<ul style="list-style-type: none"> Solvay has acquired the remaining 20% stake in Solvay Soda Ash Joint Venture, a Wyoming-based JV between Solvay and AGC that was formed in 1992. Simplifies Solvay's portfolio and is an attractive opportunity to enhance and further reinforce the business.
5/3/22	Cosmos Aromatica Internacional	Tradebe	-	-	<ul style="list-style-type: none"> Tradebe has acquired Cosmos Aromatica Internacional, a Spain-based manufacturer of flavorings for the food industry. Represents part of the strategic plan of the Tradebe Chemicals Division to become a specialized producer of raw materials for different types of industries.

SECOND QUARTER 2022 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
5/3/22	Cyalume Technologies Holdings, Inc. (Arsenal Capital Partners)	Cadre Holdings, Inc.	\$35M	-	<ul style="list-style-type: none"> Cadre Holdings has agreed to acquire Cyalume Technologies, a Massachusetts-based manufacturer of proprietary chemical illumination solutions for military, first responder and other commercial applications. Represents Cadre's second acquisition since going public less than 6 months ago.
5/2/22	Florachem Corporation (Carmelina Capital Partners)	SK Capital Partners	-	-	<ul style="list-style-type: none"> SK Capital Partners has acquired Florachem Corporation, a Florida-based manufacturer and supplier of natural plant-based ingredients including citrus, pine and specialty rosin resins. Represents SK Capital's first of two acquisitions that occurred in May 2022, with the other acquisition being that of Valtris Specialty Chemicals.
5/2/22	Nemaska Lithium Inc. (The Pallinghurst Group) (25% stake)	Livent Corporation	\$1.5B	-	<ul style="list-style-type: none"> Livent Corporation has agreed to acquire an additional 25% stake in Nemaska Lithium, a Canada-based fully integrated lithium hydroxide development project. This 25% stake is in addition to the 25% stake that Livent had previously purchased bringing their total stake in Nemaska Lithium to 50%.
5/2/22	PPM Industries (majority stake)	Auctus Capital Partners	-	-	<ul style="list-style-type: none"> Auctus Capital Partners has agreed to acquire PPM Industries, an Italy-based adhesive tape manufacturer. Auctus and Matteo Pellegrini (leading shareholder) will focus on key strategic growth initiatives to pursue new developments of the existing business by entering new geographies and new vertical markets, both organically and through acquisitions and/or joint ventures.
4/29/22	Borealis (Mubadala Investment Co.) (25% stake)	Abu Dhabi National Oil Co. (Adnoc)	-	-	<ul style="list-style-type: none"> Abu Dhabi National Oil Co. has agreed to acquire a 25% stake in Borealis, an Austria-based producer, marketer and seller of polyolefins and base chemicals. Adnoc already partners with Borealis on their Borouge olefins and polyolefins joint venture in Ruwais, Abu Dhabi.
4/29/22	Chryso's North American cement grinding aids and additives business (Saint-Gobain)	Euclid Chemical (RPM International)	-	-	<ul style="list-style-type: none"> Euclid Chemical has acquired the North American cement grinding aids and additives business of Chryso, which are used to enhance the performance of cement and to reduce CO₂ emissions during its production. Aligns Euclid Chemical more closely with the cement industry, while complementing their offering in the concrete industry.
4/27/22	Yes Powertech Co., Ltd	SK Inc.	\$152M	-	<ul style="list-style-type: none"> SK Inc. has acquired Yes Powertech, a South Korea-based manufacturer of power semiconductors based on a component of silicon and carbide (SiC). In January 2021, SK Inc. had previously secured a 33.6% stake in Yes Powertech.
4/26/22	Organix Inc.	Symeres	-	-	<ul style="list-style-type: none"> Symeres has acquired Organix Inc., a Massachusetts-based contract research organization (CRO) that offers organic synthesis services for organic chemistry industries. Helps Symeres add lipids expertise and get a strategic foothold in the U.S.
4/26/22	FMI Chemical	Novaria (KKR)	-	-	<ul style="list-style-type: none"> Novaria has agreed to acquire FMI Chemical, a Connecticut-based supplier of nonmetallic aerospace sealants, compounds and coatings. Continues to diversify and strengthen Novaria's supply of material science-based components and services.
4/22/22	Gecol	Soprema	-	-	<ul style="list-style-type: none"> Soprema has acquired Gecol, a Spain-based company that specializes in the manufacturing and marketing of cementitious adhesives, facade, technical and dry mortars. Expands Soprema's footprint in Spain.
4/20/22	DSM Protective Materials (Royal DSM)	Avient Corporation	\$1.5B	13.1x	<ul style="list-style-type: none"> Avient Corporation has agreed to acquire Royal DSM's Protective Materials business, which includes the Dyneema[®] brand. Dyneema[®] is an ultra-lightweight specialty fiber 15x stronger than steel and used in applications including ballistic personal protection, marine and sustainable infrastructure, renewable energy, industrial protection and outdoor sports. In conjunction with this acquisition, Avient has also announced that it plans to explore sale options for its Avient Distribution business.
4/20/22	South America Chemicals Business of Compass Minerals International, Inc.	Chlorum Solutions LLC (Cape Acquisitions LLC)	\$51M	-	<ul style="list-style-type: none"> Chlorum Solutions has acquired Compass Minerals' South America Chemicals Business, which includes a chlor-alkali plant and water treatment units. The sale includes all remaining Compass Minerals operations in Brazil, concluding the company's previously announced plan to exit the South American market.

SECOND QUARTER 2022 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
4/18/22	Flexible Solutions International Inc.	Lygos, Inc.	\$85.6M	-	<ul style="list-style-type: none"> Lygos has entered into a definitive merger agreement with Flexible Solutions International, a Canada-based developer and manufacturer of biodegradable, water-soluble products utilizing thermal polyaspartate (TPA) biopolymers used in applications including scale inhibition, detergent formulation, water treatment and crop enhancement. The companies plan to integrate the two complementary technology platforms, expand the portfolio of multi-functional organic acids, and scale production to meet the increasing demand for sustainable products for agricultural, industrial and consumer applications.
4/18/22	Mat, Inc.	LSC Environmental Products (Ancor Capital Partners)	-	-	<ul style="list-style-type: none"> LSC Environmental Products has acquired Mat, Inc., a Minnesota-based manufacturer of erosion control and revegetation products for hydraulic seeding applications. Augments LSC's position as a global leader in spray-applied environmental coatings and will enhance LSC's ability to address the complex global issues related to soil stabilization, revegetation, remediation, and reclamation.
4/18/22	Innovative Fragrances	Phoenix Flavors and Fragrances	-	-	<ul style="list-style-type: none"> Phoenix Flavors and Fragrances has acquired Innovative Fragrances, a Georgia-based developer and compounder of fragrance compounds serving a diverse set of end markets including home fragrance, personal care, candles and other air fresheners. Aligns with Phoenix's vision in creating a market-leading developer of high-performance flavors and fragrances, supported by a team of perfumers and regulatory experts to meet customer specific requirements and needs.
4/16/22	Airopack (Rabobank)	Platinum Invest (PIM, Axiom)	-	-	<ul style="list-style-type: none"> Platinum Invest has acquired Airopack, a Netherlands-based PET and rPET aerosol can manufacturer. Platinum Invest is supporting Airopack's relaunch out of bankruptcy.
4/15/22	Poly Compounding (majority stake)	Andy Ubhi	-	-	<ul style="list-style-type: none"> Andy Ubhi has acquired a majority stake in Poly Compounding, an Illinois-based company that provides compounding and custom mixing and blending services. Ubhi has more than 20 years of plastics experience, including positions with GE Plastics and Kraton Performance Polymers.
4/14/22	Aerospace business of Gurit	Isovolta Group (Constantia Industries AG)	-	-	<ul style="list-style-type: none"> Isovolta Group has acquired the Aerospace business of Gurit, a Switzerland-based developer, manufacturer and seller of advanced composite materials, composite tooling equipment and kitting services. Adds 80 employees at the aerospace prepreg production site in Kessel, Germany, to Isovolta's portfolio.
4/13/22	LyondellBasell's Australian polymers business	Viva Energy Group	\$29.6M	-	<ul style="list-style-type: none"> Viva Energy has agreed to acquire LyondellBasell's Australian polymers business, an Australia-based producer, marketer and seller of polypropylene. Signifies another step in Viva Energy's development of their Geelong Energy Hub and the further diversification of their Commercial and Industrial businesses.
4/12/22	Lohnpack Contract Filling	Matrix Adhesives Group (Goldner Hawn)	-	-	<ul style="list-style-type: none"> Matrix Adhesives has acquired Lohnpack Contract Filling, a New Jersey-based provider of filling and packaging for chemicals, paints and adhesives into a variety of containers. Expands Matrix's capabilities while strengthening its commitment to provide a broad suite of formulating, compounding, manufacturing and packaging solutions to its customers.
4/12/22	Taiyo Vinyl Corp. (16% stake)	Tosoh	-	-	<ul style="list-style-type: none"> Tosoh has acquired an additional 16% stake in Taiyo Vinyl Corporation, a Japan-based manufacturer of plastics materials and resins. Tosoh now has a 84% stake in Taiyo after previously acquiring a 68% stake in 2002.
4/12/22	Air Liquide Emirates/Middle East Carbon Dioxide W.L.L.	Air Products and Chemicals, Inc.	-	-	<ul style="list-style-type: none"> Air Products has acquired the industrial gases business in the United Arab Emirates of Air Liquide, a France-based provider of gases, technologies and services for the industrial and health sectors. Builds on many years of experience working in and serving customers in the Middle East and supports Air Products' regional growth strategy.
4/11/22	Prefere Resins Holding GmbH (Silverfleet Capital Partners)	One Rock Capital Partners, LLC	-	-	<ul style="list-style-type: none"> One Rock Capital Partners has agreed to acquire Prefere Resins, a Germany-based manufacturer and seller of phenolic and amino resins, and related additives and adhesives for industrial, construction and insulation applications. Helps Prefere to further grow into underpenetrated markets and expand the company's product portfolio.

SECOND QUARTER 2022 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
4/11/22	Hanseatic Energy Hub GmbH (minority stake)	Dow Inc.	-	-	<ul style="list-style-type: none"> Dow has agreed to acquire a minority stake in Hanseatic Energy Hub GmbH, a Germany-based consortium, which now includes Dow, Fluxys, Partners Group and Buss Group. Aims to advance Germany's capabilities to import supplies of liquified natural gas (LNG), bio-liquified natural gas and synthetic natural gas through the construction of an import terminal.
4/6/22	VPM Plast (76% stake)	Carmel Olefins	\$12M	-	<ul style="list-style-type: none"> Carmel Olefins has agreed to acquire VPM Plast, an Israel-based company engaged in mechanical plastic recycling. Signifies a major step toward realizing Carmel's vision of becoming a leader in the plastic recycling market in Israel and achieving its goals for incorporating advanced—recycled and degradable—polymers in its product line: 15% to 2025, and 30% in 2030.
4/5/22	Hohman Plating	Novaria (KKR)	-	-	<ul style="list-style-type: none"> Novaria has acquired Hohman Plating, an Ohio-based finishing and coatings business serving the worldwide aerospace and defense market. Expands Novaria's suite of aerospace components and proprietary coating solutions.
4/1/22	Business Activities of PPG in Africa	Groupe Océinde	-	-	<ul style="list-style-type: none"> Océinde has agreed to acquire certain business activities of PPG in Senegal, Ivory Coast, Cameroon, Gabon and Algeria. Océinde will continue to offer the existing range of products, including SEIGNEURIE paint, through a licensing and distribution agreement. Strengthens a long-standing relationship between the companies, which includes the supply of specialty materials from Océinde to PPG.
4/1/22	ReMat Zrt.	MOL Group	-	-	<ul style="list-style-type: none"> MOL Group has acquired ReMat Zrt., a Hungary-based recycler of plastic waste and off-grade products. Aligns with MOL's strategic goal to become a key player in the low carbon circular economy in Central and Eastern Europe.

SECOND QUARTER 2022 POLYMER CONVERTER TRANSACTIONS

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
6/30/22	Anchor Printing	Fortis Solutions Group (Harvest Partners)	-	-	<ul style="list-style-type: none"> Fortis Solutions has acquired Anchor Printing, a Michigan-based flexographic and offset printing specialist providing shrink sleeves, flexible packaging and pressure-sensitive labels across a range of industries. Employing over 1,200 employees across eighteen manufacturing sites, Fortis intends to continue its pursuit of attractive acquisitions to further the breadth of product offerings and locations that can serve its customer base.
6/28/22	Petainer	Ara Partners	-	-	<ul style="list-style-type: none"> Ara Partners has acquired Petainer, a UK-based, global producer of sustainability-focused beverage packaging solutions. Represents a strategic fit to Ara's portfolio of companies working to decarbonize the packaging industry through technical innovation.
6/23/22	Ipotec LLC	Marco Rubber & Plastics (Align Capital Partners)	-	-	<ul style="list-style-type: none"> Marco Rubber & Plastics has acquired Ipotec LLC, a New Hampshire-based distributor and fabricator of high-performance elastomeric materials and components. Expands Marco's sourcing capabilities and strengthens their already broad offering of products and services.
6/22/22	United Poly Systems (Industrial Opportunity Partners, LLC)	Atkore Inc.	-	-	<ul style="list-style-type: none"> Atkore Inc. has acquired United Poly Systems, a Missouri-based manufacturer of polyethylene and duct pipes. Strengthens Atkore's product portfolio, expands their manufacturing capacity and further enables them to meet HDPE customers' needs.
6/22/22	Banaplast S.A.S	Transcontinental Inc.	-	-	<ul style="list-style-type: none"> Transcontinental Inc. has acquired Banaplast S.A.S, a Colombia-based provider of films for the protection of crops in the banana and plantain agro-industrial sector and other fruit plantations. Aligns with Transcontinental's growth strategy of innovation and proximity to key markets in the agro-industrial segment.
6/21/22	Jain Irrigation Systems Ltd.'s International Irrigation Business	Rivulis Pte. Ltd. (Temasek Capital Management Pte. Ltd., Jaya Hind Industries Ltd.)	-	-	<ul style="list-style-type: none"> Rivulis Pte. Ltd. has agreed to merge with Jain Irrigation Systems Ltd.'s International Irrigation Business, an India-based company that is engaged in providing solutions in agriculture, water and food sectors through manufacturing of micro irrigation systems, PVC pipes, HDPE pipes, plastic sheets, agro processed products, renewable energy solutions, tissue culture plants, financial services, and other agricultural inputs. Benefits from significant operational economies of scale and through this merger will cement their role as a market consolidator and create a single company with a stronger financial foundation.
6/20/22	Flex Foam	Wm. T Burnett & Co.	-	-	<ul style="list-style-type: none"> Wm. T. Burnett & Co. has acquired Flex Foam, an Arizona-based polyurethane open cell foam maker for the furniture, bedding, automotive, packaging and flooring industries. Expands Burnett's ability to produce specialty urethane foams in Phoenix that meet exacting technical specifications for use in a wide range of industries.
6/17/22	GoProto Inc.	Core Industrial Partners	-	-	<ul style="list-style-type: none"> Core Industrial Partners has acquired GoProto Inc., a California-based company that offers a broad assortment of additive manufacturing technologies, primarily focusing on multi-jet fusion, fused deposition modeling, selective laser sintering, stereolithography and polyjet printing. Brings a large base of industry-leading customers and GoProto's extensive in-house multi-jet fusion offering that is uniquely suited to serve the expanding market for higher-volume additive production.
6/17/22	Schur Flexibles (80% stake from The B&C Group)	Apollo and other creditors	-	-	<ul style="list-style-type: none"> Apollo and other creditors have agreed to acquire an 80% stake in Schur Flexibles, an Austria-based producer of flexible packaging solutions for food, tobacco and healthcare industries. The acquisition stems from B&C finding serious irregularities in Schur Flexibles' balance sheet.
6/8/22	PET film business of SK Group	Hahn & Company	\$1.3B	-	<ul style="list-style-type: none"> Hahn & Company has agreed to acquire the PET film business of SK Group, the largest PET film business in Korea and the fourth-largest globally, with revenues of \$953 million in 2021. Further Hahn & Co.'s focus on private equity acquisitions in Korea and builds upon its track record of successfully acquiring and revamping Korean companies, building globally leading companies in industrial products, transportation and business services.

SECOND QUARTER 2022 POLYMER CONVERTER TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
6/7/22	MXL Industries, Inc.	Plaskolite, LLC (Pritzker Private Capital)	-	-	<ul style="list-style-type: none"> Plaskolite, LLC has acquired MXL Industries, Inc., a Pennsylvania-based manufacturer of injection molded optical quality plastic components for use in motorsports, military, medical/dental, industrial safety and security industries. Marks the 21st acquisition in 15 years for Plaskolite and strengthens Plaskolite's existing coatings business, complements existing polycarbonate production and expands its broad product offering to include specialty-crafted optical thermoplastic solutions.
6/7/22	Rotational molding business of Berry Global Group Inc.	Rotovia (Freyja and SIA IV)	-	-	<ul style="list-style-type: none"> Rotovia has acquired the rotational molding business of Berry Global Group Inc., which includes 14 locations across 10 countries in Europe and Canada, employing around 800 people. Fits Rotovia's goal of forming an international supplier of rotomolded products.
6/3/22	Euro-American Plastics	Davies Molding LLC (The Heico Companies)	-	-	<ul style="list-style-type: none"> Davies Molding LLC has acquired Euro-American Plastics, a Mississippi-based high precision injection molder for automotive, consumer goods and electrical product sectors. The acquired business adds 15 injection molding presses, a full in-house tool repair shop and a wealth of molding and engineering knowledge to the Davies brand.
6/3/22	Indepak, Inc.	Sinclair & Rush, Inc. (Cameron Holdings Corporation)	-	-	<ul style="list-style-type: none"> Sinclair & Rush has acquired Indepak, an Oregon-based company that provides specialty thin-gauge thermoforming services. Increases Sinclair & Rush's thermoforming capacity and capabilities while also providing a manufacturing footprint on the west coast.
5/31/22	High Performance Plastic Parts Business of MANN+HUMMEL	Mutares SE & Co.	-	-	<ul style="list-style-type: none"> Mutares has agreed to acquire the High Performance Plastic Parts Business of MANN+HUMMEL, a Germany-based company that develops, manufactures and supplies filtration and separation systems for transportation and life sciences applications. Exhibits synergy potential with LMS and the SFC Solutions Group that will make the company an indispensable partner in the automotive supply sector of plastics and elastomers.
5/31/22	Kaycan Ltd.	Saint-Gobain	\$928M	-	<ul style="list-style-type: none"> Saint-Gobain has agreed to acquire Kaycan Ltd, a Canada-based manufacturer and distributor of exterior building materials. Reinforces Saint-Gobain's strong footprint in light and sustainable construction by becoming the top siding player in Canada and enlarging its vinyl offering across the United States with complementary solutions including aluminum and engineered wood.
5/31/22	Safeplast	Protective Industries (Berwind Corporation)	-	-	<ul style="list-style-type: none"> Protective Industries (dba Caplugs) has acquired Safeplast, a Finland-based manufacturer of HDPE hose protectors and hose binding products for the hydraulics industry and other purposes. Marks Protective Industries' fourth acquisition since being acquired by Berwind in April 2015.
5/24/22	Variotech (majority stake)	Gimv	-	-	<ul style="list-style-type: none"> Gimv has acquired a majority stake in Variotech, a Germany-based manufacturer of thermoformed workpiece carriers, which are primarily used in fully automated manufacturing processes for transporting and handling components of various forms and sizes. Represents a new addition to Gimv's Smart Industries portfolio.
5/20/22	Metro Plastics Technologies	Newbury Franklin Industrials	-	-	<ul style="list-style-type: none"> Newbury Franklin Industrials has acquired Metro Plastics Technologies, an Indiana-based custom plastic injection molding company. Represents a cultural alignment that gives NFI the ability to carry on the legacy of the owners of MPT, which was their main goal when deciding on a suitor for sale.
5/18/22	Jablite Group (51% stake)	BEWI	\$24.3M	-	<ul style="list-style-type: none"> BEWI has acquired the remaining 51% stake in Jablite, a UK-based provider of EPS insulation and packaging. Strengthens BEWI market position in the UK as the company is now the 100% owner of Jablite.
5/12/22	Decatur, Georgia rotational molding manufacturing assets of Step2 Co, LLC	Myers Industries	-	-	<ul style="list-style-type: none"> Myers Industries has acquired the Decatur, Georgia rotational molding manufacturing assets of Step2 Co, LLC, an Ohio-based plastic products maker. Expands Myers' rotational production capacity and allows it to support new and existing customers in the southern United States.
5/11/22	Plásticos Uribe SA de CV	St. Johns Packaging Ltd.	-	-	<ul style="list-style-type: none"> St. Johns Packaging Ltd. has acquired Plásticos Uribe SA de CV, a Mexico-based flexible packaging converter. Follows St. Johns recent startup of a plant in León (Guanajuato, Mexico), adding another step to their investment in the Mexican market.

SECOND QUARTER 2022 POLYMER CONVERTER TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
5/11/22	Semco Plastics Co.	Tank Holdings (Olympus)	-	-	<ul style="list-style-type: none"> Tank Holdings has acquired Semco Plastics, a Missouri-based blow and injection molder serving the recreational, commercial, outdoor, engine and other industries. Fits Tank Holdings' strategy to invest into adjacent plastic processing technologies and gives them the opportunity to utilize blow molding to expand their proprietary product offering while also complementing their commitment to custom molding.
5/10/22	perPETual Technologies (majority stake)	Heraeus Holding GmbH	-	-	<ul style="list-style-type: none"> Heraeus Holding has acquired a majority stake in perPETual Technologies, a Germany-based manufacturer of polyester filament yarn made from used PET plastic bottles. Fits Heraeus' portfolio and will add to the company's plan to expand production capacity in India and globally.
5/10/22	Diamond Flexible Packaging Co.	Brook & Whittle Limited (Genstar Capital)	-	-	<ul style="list-style-type: none"> Brook & Whittle has acquired Diamond Flexible Packaging, an Illinois-based flexible packaging printer and converter. Strengthens Brook & Whittle's wide web printing capabilities and helps fuel growth in key strategic markets.
5/6/22	engineering plastics business of Ester Industries Ltd	Radici Group	\$36.5M	-	<ul style="list-style-type: none"> Radici Group has acquired the engineering plastics business of Ester Industries Ltd, an India-based manufacturer and seller of polyester films and engineering plastics. Gives Radici their own production plant in India, building on their well-established commercial presence in the country.
5/4/22	Action Molding Inc.	Orchard Creek Capital LLC	-	-	<ul style="list-style-type: none"> Orchard Creek Capital has acquired Action Molding, a Michigan-based custom injection molder. The deal is Orchard Creek's fourth since the private equity firm was founded in 2017 in Northville, Mich., near Detroit.
5/4/22	FormTex Plastics Corporation	Good Natured Products Inc.	\$4.8M	-	<ul style="list-style-type: none"> Good Natured Products has agreed to acquire FormTex Plastics Corporation, a Texas-based packaging producer for the medical, food, electronic, industrial and retail markets. Introduces cost synergies by directing internally-produced extruded rollstock sheet for use in FormTex's operations, expanded capacity to handle the Company's growth trajectory, and through logistic and operational efficiencies.
5/2/22	Cultec, Inc.	Advanced Drainage Systems, Inc.	-	-	<ul style="list-style-type: none"> Advanced Drainage Systems has acquired Cultec, a Connecticut-based plastic stormwater and septic chamber company. Expands ADS' portfolio of solutions, enabling them to meet the evolving needs of customers.
4/29/22	Varroc Lighting Systems	Plastic Omnium	\$632M	-	<ul style="list-style-type: none"> Plastic Omnium has agreed to acquire Varroc Lighting Systems, a Michigan-based designer and manufacturer of automotive exterior lighting products. Complete Plastic Omnium's lighting offer and allows them to create a new strategic lighting division in 2022.
4/29/22	Raven Engineered Films (CNH Industrial)	Industrial Opportunity Partners	\$350M	-	<ul style="list-style-type: none"> Industrial Opportunity Partners has acquired Raven Engineered Films, a South Dakota-based manufacturer of flexible films and sheeting. Gives IOP the ability to help Raven grow beyond their existing customer base that has been built through innovation, reliability and quality.
4/27/22	Cam Packaging	Inline Plastics	-	-	<ul style="list-style-type: none"> Inline Plastics has acquired Cam Packaging, a Michigan-based company that provides plastic thermoforming services, specializing in food containers as well as plastic containers for automotive and retail packaging. Secures a Midwest production and distribution facility to complement Inline's existing facilities in Shelton, CT in the Northeast; McDonough, GA in the South; and Salt Lake City, UT in the West.
4/26/22	EirMed	Trelleborg	-	-	<ul style="list-style-type: none"> Trelleborg has acquired EirMed, a Wisconsin-based maker of technical precision plastic injection-molded components. Gives Trelleborg access to new markets, applications and customers, while EirMed's solutions will gain access to Trelleborg's broad sales channels.
4/25/22	WearDeck® (JR Plastics Corporation)	Owens Corning	-	-	<ul style="list-style-type: none"> Owens Corning has agreed to acquire WearDeck®, a Florida-based premium producer of composite weather-resistant decking for commercial and residential applications. Advances Owens Corning's strategy to drive continued growth and pivot their Composites business to focus on high-value material solutions within the building and construction space.
4/22/22	Assets of Vantage Products Corp.	20/20 Custom Molded Plastics LLC (Inteplast)	-	-	<ul style="list-style-type: none"> 20/20 Custom Molded Plastics has acquired the assets of Vantage Products Corp., a Georgia-based manufacturer of polypropylene funeral services merchandise. Represents a timely acquisition for 20/20 as they seek to expand their footprint in the area of customs molding in order to better accommodate customers.

SECOND QUARTER 2022 POLYMER CONVERTER TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
4/11/22	Nedupack	New Packaging Group (NewPort Capital)	-	-	<ul style="list-style-type: none"> New Packaging Group has acquired Nedupack, a Netherlands-based provider of thermoformed packaging for consumer, food, pharma and industrial applications. In addition to Nedupack, the New Packaging Group currently consists of industry peers Bliston Packaging and Meulendijks Packaging.
4/8/22	Maillis Plastics Solutions (H.I.G. Capital)	Teufelberger and Sigma Plastics Group	-	-	<ul style="list-style-type: none"> Teufelberger and Sigma have acquired Maillis Plastics Solutions, a Poland-based stretch film and strapping manufacturing unit of Maillis Group. Marks the entry into the European market for the U.S. company Sigma Plastics Group and expands Teufelberger's footprint in Poland.
4/7/22	QSR (Q Holding, 3i)	Daetwyler	\$625M	-	<ul style="list-style-type: none"> Daetwyler has agreed to acquire QSR, an Ohio-based supplier of seals and components for electrical connectors made of silicone. Strategically expands Daetwyler's existing portfolio and geographic footprint. With this acquisition, Daetwyler will become a leading global supplier of system-critical sealing solutions for electrical connectors for a diverse range of industries.
4/1/22	HST Materials, Inc.	JBC Technologies, Inc. (River Associates)	-	-	<ul style="list-style-type: none"> JBC Technologies has acquired HST Materials, an Illinois-based manufacturer of gaskets, seals and molded rubber parts, custom designed elastomers, and tape solutions. Strategically expands JBC's geographic footprint while adding additional market presence in the automotive and off-road transportation sector.
4/1/22	Sonoco do Brasil Participacoes (33.33% stake)	Sonoco	-	-	<ul style="list-style-type: none"> Sonoco has acquired the remaining one-third stake in Sonoco do Brasil Participacoes, a Brazil-based flexible packaging joint venture. Sonoco had previously acquired a two-thirds stake in the joint venture from Graffo Paranaense de Embalagens S/A in March 2015.
3/29/22	Molding Machines and other key assets of Sur-Seal LLC	A.L.P. Lighting Components Inc.	-	-	<ul style="list-style-type: none"> A.L.P. Lighting Components has acquired Molding Machines and other key assets of Sur-Seal, an Ohio-based manufacturer and distributor of rubber and plastic products. Expands A.L.P.'s optical silicone molding capabilities and allows Sur-Seal to focus on its core business: silicone gaskets.

SECOND QUARTER 2022 DISTRIBUTION TRANSACTIONS

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
6/30/22	Specialty lubricant (L&MWF1) distribution assets of Ak-taş	Azelis	-	-	<ul style="list-style-type: none"> Azelis has agreed to acquire the specialty lubricant (L&MWF1) distribution assets of Ak-taş, a Turkey-based distributor of petrochemicals. The transaction includes the oil additive business of Ak-taş as well as the base oil distribution business of Whitechem, a subsidiary of Ak-taş. Strengthens Azelis' lateral value chain (LVC) in the L&MWF market segment, following the acquisition of Umongo in South Africa earlier this year.
6/29/22	Orange Line Oil Company, Inc.	RelaDyne, Inc. (American Industrial Partners)	-	-	<ul style="list-style-type: none"> RelaDyne, Inc. has acquired Orange Line Oil Company, Inc., a California-based distributor and wholesaler of lubrication products. Represents RelaDyne's third investment in the state of California in less than two years and continues RelaDyne's execution of their West Region expansion strategy.
6/27/22	Ashapura Aromas Private Limited	Azelis Group NV	-	-	<ul style="list-style-type: none"> Azelis Group NV has agreed to acquire Ashapura Aromas Private Limited, an India-based distributor of ingredients in the flavors & fragrances market. Provides Azelis with a strong F&F platform in Asia Pacific, creating a global F&F network, following its 2021 acquisitions of Vigon in the U.S. and Quimdis in France, serving the Americas and EMEA regions respectively.
6/21/22	Welex S.A. Holdings (China) Limited	IMCD N.V.	-	-	<ul style="list-style-type: none"> IMCD N.V. has agreed to acquire Welex S.A. Holdings (China) Limited, a China-based specialty chemicals distributor with a focus on industries covering coatings and inks, textiles, additives for specialty compounding, and agrochemicals. Adds 68 employees and roughly €39 million in sales, and allows IMCD to diversify their coatings, paint and ink business, enter the fast-growing agrochemical market, and develop into highly valuable specialty compounding applications.
6/20/22	Rocsa Colombia (majority stake)	Azelis	-	-	<ul style="list-style-type: none"> Azelis has agreed to acquire a majority stake in Rocsa Colombia, a Colombia-based specialty chemical distributor active in life sciences and industrial chemicals. Provides Azelis with a significant foothold in the South American market, as well as the opportunity to expand with their customers and principals, in line with their strategic vision in the region.
6/10/22	Andler Packaging	Berlin Packaging (Oak Hill, CPP Investments)	-	-	<ul style="list-style-type: none"> Berlin Packaging has acquired Andler Packaging, a Massachusetts-based value-added distributor of plastic, glass, and metal containers and closures. Helps Berlin Packaging to expand its pharmaceutical and nutraceutical offerings and add multiple distribution centers in New England.
6/10/22	Temati Group	Ipcom (Alpha Group)	-	-	<ul style="list-style-type: none"> Ipcom has acquired Temati Group, a Netherlands-based supplier of specially designed insulation protection materials (mastics, coatings, foils), technical fabrics & flexible insulation jackets as well as materials for inspection and detection (CUI, corrosion prevention) and ancillary products (sealants, adhesives, tapes). Adds roughly €12 million in revenue and accelerates Ipcom's growth in the industrials market.
6/8/22	Al-Azzaz Chemicals Co. (75% stake)	Trychem FZCO (Brenntag)	-	-	<ul style="list-style-type: none"> Trychem FZCO has agreed to acquire a 75% stake in Al-Azzaz Chemicals Co., a Saudi Arabia-based distributor of specialty chemicals with a focus on food and pharmaceuticals, plastics and material science additives and petrochemicals. Expands Brenntag's presence and footprint within Saudi Arabia.
5/31/22	European Additives GmbH	Safic-Alcan (Sagard, EMZ Partners, Société Générale Capital Partenaires)	-	-	<ul style="list-style-type: none"> Safic-Alcan has acquired European Additives GmbH, a Germany-based distributor of polymer additives, such as antioxidants, UV-stabilizers and flame retardants. Reinforces Safic-Alcan's activities in Germany and provides further opportunity to grow across their geographies.
5/31/22	Galenicum Special Ingredients (Galenicum Group Holding)	Grupo Indukern (Ravago Group)	-	-	<ul style="list-style-type: none"> Grupo Indukern has acquired Galenicum Special Ingredients, a Spain-based company that specializes in nutritional ingredients and supplements, sports nutrition, dietary products and nutraceuticals. Fits Grupo Indukern's strategy to obtain access into the nutritional products and food ingredients sector.
5/30/22	Food Industry Technology Ltd	Caldic B.V. (GTM, Advent International)	-	-	<ul style="list-style-type: none"> Caldic B.V. has acquired Food Industry Technology Ltd, a UK-based distributor of food ingredients and functional blends targeting nutrition, texture and taste functionalities in particular. Strengthens Caldic's footprint in the UK food industry through a significant increase in scale and continued focus on functional food ingredients.
5/25/22	Chemo India's and Unipharm Laboratories' distribution assets	Azelis	-	-	<ul style="list-style-type: none"> Azelis has agreed to acquire the distribution assets of Chemo India and Unipharm Laboratories, two India-based distributors of specialty chemicals and ingredients for the CASE, lubricants & metalworking fluids and pharmaceutical segments. Strengthens Azelis' industrial chemicals portfolio and its footprint in the pharmaceutical market, further reinforcing Azelis' lateral value chain for these market segments.

SECOND QUARTER 2022 DISTRIBUTION TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
5/24/22	VCA Solutions (remaining 50% from Club Assist)	Valvoline	-	-	<ul style="list-style-type: none"> Valvoline has acquired the remaining 50% stake from Club Assist in their joint venture VCA Solutions, a Florida-based distributor of automotive batteries and battery testing equipment. Enables new efficiencies and automotive solutions for installers, Valvoline Retail Services company-owned, franchise-owned and independently operated service centers, while growing the product portfolio for hybrid and electric vehicles in the future.
5/23/22	PetroChoice Lubrication Solutions (Golden Gate Capital)	Moove (Cosan)	\$479M	-	<ul style="list-style-type: none"> Moove has acquired PetroChoice Lubrication Solutions, a Pennsylvania-based distributor and manufacturer of value-added lubricant solutions. Establishes a market-leading presence and distribution footprint for Moove in the U.S. lubricants market. Moove will leverage its lubes market expertise, technology, manufacturing capabilities and investment capabilities to support the continued development of PetroChoice and its growth plans.
5/16/22	Noble Gas Solutions	Air Water America (Air Water Inc.)	-	-	<ul style="list-style-type: none"> Air Water America has acquired Noble Gas Solutions, a New York-based distributor of oxygen, helium and argon. Expands Air Water's North American portfolio, purchasing equipment makers and gas suppliers with a strong presence in Florida, Georgia, the Carolinas, Texas and the Midwest.
5/13/22	Satucesa	Baobag (LBO France)	-	-	<ul style="list-style-type: none"> Baobag has acquired Satucesa, a Spain-based wholesaler of flexible intermediate bulk containers. Represents Baobag's first acquisition in Europe. Allows Baobag to have a modern logistics center near a major Mediterranean port and to generate synergies with its subsidiary Baobag Iberica.
5/5/22	Faber&VanderEnde BV	Richard Baker Harrison Limited	-	-	<ul style="list-style-type: none"> Richard Baker Harrison Limited has acquired Faber&VanderEnde BV, a Netherlands-based specialty industrial chemicals distributor. Represents an important strategic investment for RBH as they continue to broaden their portfolio of products and resources.
5/2/22	ArtSci Biology Technologies Co., Ltd	Firmenich (Royal DSM)	-	-	<ul style="list-style-type: none"> Firmenich has agreed to increase their equity stake and become the majority owner of ArtSci Biology Technologies Co., Ltd, a China-based distributor specializing in dairy, beverages, bakery and confectionery. ArtSci and Firmenich have been strategic partners since 2019, when Firmenich took a minority equity stake. This move will further strengthen Firmenich's ability to serve the rapidly growing Chinese local market and extend its geographic reach across China.
4/13/22	Assets of Oy Baritec AB	Distrupol Limited (GPD Companies, One Rock Capital Partners)	-	-	<ul style="list-style-type: none"> Distrupol has agreed to acquire assets of Oy Baritec AB, a Finland-based distributor of plastics and plastic additives. Extends the presence of GPD and continues the execution of their growth strategy.
4/12/22	Prime Industries	Applied Adhesives (Arsenal Capital Partners)	-	-	<ul style="list-style-type: none"> Applied Adhesives has acquired Prime Industries, a Colorado-based supplier of adhesives, sealants and dispensing equipment solutions. Strengthens the company's commitment to providing industry-leading products, technical expertise and service to its customers.
4/10/22	PB Packaging (Pro-Pac Packaging Limited)	TricorBraun (Ares Management, Ontario Teachers' Pension Plan)	\$41.5M	-	<ul style="list-style-type: none"> TricorBraun has agreed to acquire PB Packaging, an Australia-based importer, manufacturer and supplier of rigid plastic and glass packaging materials. Expands TricorBraun's business in Australia. TricorBraun previously established its footprint in the region with its acquisition of Cormack Packaging in September 2021.
4/6/22	PBFY Flexible Packaging (Pacific Western Sales)	TricorBraun (Ares Management, Ontario Teachers' Pension Plan)	-	-	<ul style="list-style-type: none"> TricorBraun has agreed to acquire PBFY, a California-based manufacturer and distributor of plastic packaging pouches, films and digital labels. Expands TricorBraun's flexible packaging division, TricorBraun Flex.
3/28/22	Orosolv	OQEMA	-	-	<ul style="list-style-type: none"> OQEMA has acquired Orosolv, a France-based distributor of chemical products, lubricants, heat transfer fluids, surface treatment products and paints. Expands OQEMA's infrastructure and network of warehouses. Additionally, Orosolv's focus on repackaging and the formulation of paints and solvents complements OQEMA's offer as well as strengthens OQEMA's position in France and the wider European chemical distribution marketplace.

Source: Target/acquirer press releases

PNC'S CHEMICALS & PLASTICS EXPERIENCE

Lending Experience

<p>June 2022</p> <p>ingevity</p> <p>\$1,000,000,000 \$375,000,000 \$375,000,000</p> <p>Revolving Credit Facility Term Loan A Term Loan A</p> <p>Syndication Agent, Documentation and Arranger</p>	<p>June 2022</p> <p>KOPPERS</p> <p>\$800,000,000</p> <p>Revolving Credit Facility</p> <p>Admin. Agent</p>	<p>June 2022</p> <p>Westlake Chemical</p> <p>\$1,500,000,000</p> <p>Revolving Credit Facility</p> <p>Co-Documentation Agent</p>	<p>May 2022</p> <p>ADS</p> <p>\$600,000,000 \$436,000,000</p> <p>Revolver Term Loan B</p> <p>Admin. Agent</p>	<p>May 2022</p> <p>HUNTSMAN</p> <p>\$1,200,000,000</p> <p>Revolving Credit Facility</p> <p>Syndication Agent</p>	<p>April 2022</p> <p>Colorcon</p> <p>\$600,000,000 \$400,000,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>Administrative Agent</p>
<p>March 2022</p> <p>Entegris</p> <p>\$2,495,000,000</p> <p>Delayed Draw Term Loan</p> <p>Joint Lead Arranger & Bookrunner</p>	<p>March 2022</p> <p>Celanese</p> <p>\$1,750,000,000 \$1,500,000,000</p> <p>Revolving Credit Facility Delayed Draw Term Loan</p> <p>Participant</p>	<p>March 2022</p> <p>KaMin</p> <p>\$325,000,000</p> <p>Delayed Draw Term Loan</p> <p>Administrative Agent</p>	<p>December 2021</p> <p>Plastipak</p> <p>\$300,000,000 \$250,000,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>Co-Documentation Agent & Bookrunner</p>	<p>October 2021</p> <p>ADVANSIX</p> <p>\$500,000,000</p> <p>Revolving Credit Facility</p> <p>JLA & Syndication Agent</p>	<p>October 2021</p> <p>GOJO</p> <p>\$450,000,000</p> <p>Revolving Credit Facility</p> <p>Admin. Agent</p>
<p>August 2021</p> <p>Mosaic</p> <p>\$2,500,000,000</p> <p>Revolving Credit Facility</p> <p>JLA & Co-Documentation Agent</p>	<p>August 2021</p> <p>CHASE Corporation</p> <p>\$200,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>	<p>July 2021</p> <p>CMC MATERIALS</p> <p>\$350,000,000</p> <p>Revolving Credit Facility</p> <p>Documentation Agent</p>	<p>June 2021</p> <p>SHERWIN-WILLIAMS</p> <p>\$2,000,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>	<p>June 2021</p> <p>Nutrien</p> <p>\$4,500,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>	<p>May 2021</p> <p>SENSIENT</p> <p>\$350,000,000</p> <p>Revolving Credit Facility</p> <p>Co-Lead Arranger and Syndication Agent</p>
<p>May 2021</p> <p>FMC</p> <p>\$1,500,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>	<p>April 2021</p> <p>Milliken</p> <p>\$200,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>	<p>April 2021</p> <p>Entegris</p> <p>\$400,000,000 \$400,000,000</p> <p>Revolving Credit Facility Term Loan B</p> <p>JLA & Bookrunner</p>	<p>April 2021</p> <p>pmc</p> <p>\$200,000,000 \$50,000,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>Admin. Agent</p>	<p>March 2021</p> <p>myers INDUSTRIES</p> <p>\$250,000,000</p> <p>Revolving Credit Facility</p> <p>Co-Documentation Agent</p>	<p>February 2021</p> <p>SWM</p> <p>\$500,000,000 \$350,000,000</p> <p>Revolving Credit Facility Term Loan B</p> <p>Documentation Agent</p>
<p>February 2021</p> <p>PPG Industries</p> <p>\$2,000,000,000</p> <p>Delayed Draw Term Loan</p> <p>Co-Lead Arranger & Syndication Agent</p>	<p>January 2021</p> <p>RAYONIER Advanced Materials</p> <p>\$200,000,000</p> <p>Revolving Credit Facility</p> <p>JLA & Bookrunner</p>	<p>April 2020</p> <p>Purolite</p> <p>\$50,000,000 \$175,000,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>JLA</p>	<p>April 2020</p> <p>lyondellbasell</p> <p>\$2,000,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>	<p>April 2020</p> <p>RPM</p> <p>\$1,300,000,000</p> <p>Revolving Credit Facility</p> <p>JLA & Admin. Agent</p>	<p>March 2020</p> <p>NewMarket</p> <p>\$900,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>
<p>January 2020</p> <p>Ashland always solving</p> <p>\$600,000,000 \$250,000,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>Senior Co-Arranger</p>	<p>December 2019</p> <p>OCF Industries</p> <p>\$750,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>	<p>December 2019</p> <p>Olin</p> <p>\$80,000,000 \$1,200,000,000</p> <p>Revolving Credit Facility Term Loan</p> <p>Syndication Agent</p>	<p>November 2019</p> <p>Compass Minerals</p> <p>\$300,000,000 \$400,000,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>Syndication Agent</p>	<p>September 2019</p> <p>ADS</p> <p>\$350,000,000 \$700,000,000</p> <p>Revolving Credit Facility Term Loan</p> <p>Joint Lead Arranger</p>	<p>August 2019</p> <p>Quaker Houghton</p> <p>\$400,000,000 \$600,000,000 / €134,800,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>Documentation Agent & JLA</p>

Bonds Experience

<p>January 2022</p> <p>CALUMET</p> <p>\$325,000,000</p> <p>Senior Notes</p> <p>Joint Bookrunner</p>	<p>January 2022</p> <p>RPM</p> <p>\$300,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>	<p>November 2021</p> <p>SHERWIN-WILLIAMS</p> <p>\$1,000,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>	<p>August 2021</p> <p>Westlake Chemical</p> <p>\$1,700,000,000</p> <p>Senior Notes</p> <p>Passive Joint Bookrunner</p>	<p>August 2021</p> <p>Ashland always solving</p> <p>\$450,000,000</p> <p>Senior Notes</p> <p>Senior Co-Manager</p>	<p>July 2021</p> <p>Celanese</p> <p>\$400,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>
<p>May 2021</p> <p>HUNTSMAN</p> <p>\$400,000,000</p> <p>Senior Notes</p> <p>Joint Bookrunner</p>	<p>April 2021</p> <p>Entegris</p> <p>\$400,000,000</p> <p>Senior Notes</p> <p>Joint Bookrunner</p>	<p>April 2021</p> <p>NOVA Chemicals</p> <p>\$575,000,000</p> <p>Senior Notes</p> <p>Joint Bookrunner</p>	<p>March 2021</p> <p>PPG Industries</p> <p>\$700,000,000</p> <p>Senior Notes</p> <p>Joint Bookrunner</p>	<p>December 2020</p> <p>Valspar</p> <p>\$535,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>	<p>December 2020</p> <p>RAYONIER Advanced Materials</p> <p>\$500,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>

- 1** U.S. Supreme Court (*West Virginia v. EPA*); California Legislative Information (Senate Bill No. 54)
2 California Legislative Information (Senate Bill No. 54)

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