

CHEMICALS & PLASTICS NEWSLETTER

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It's hard to believe we're in the home stretch of 2021. As we all continue to work through this ever changing environment, we look forward to discussing updates in-person or virtually. In the meantime, we are here to address any special requests or questions that you may have. In this issue of PNC's *Chemicals & Plastics Newsletter*, we highlight the third quarter 2021 market activity and provide insight into the trends that defined the quarter.

RECENT HEADLINES

Energy: Just when you thought raw material prices could moderate, energy comes roaring back into the picture. Natural gas prices were poised to close September near seven-year highs, and it's not even cold yet (at least not in Cleveland, thankfully). There are a host of international drivers: Europe having trouble drumming up wind, China's efforts to reduce dependence on coal, etc. The rising costs had Yara and others reducing European ammonia production toward the end of September. Even with local ammonia prices more than double what they were in January, the recent run-up in gas prices has made passing on costs a challenge. As increases in gas begin to push oil higher, it feels safe to say that raw material prices will remain elevated in the near term.

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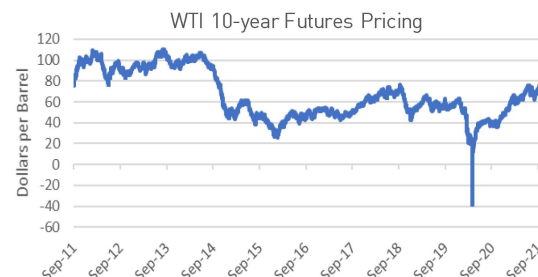
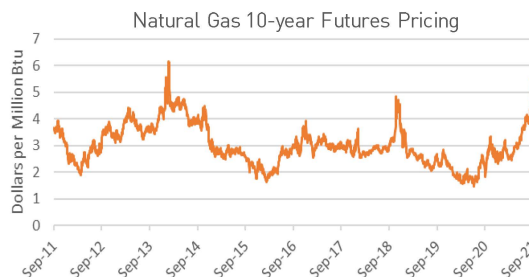
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The energy issues aren't just raising prices, they're impacting everybody's second favorite topic: supply chains. In certain parts of China, manufacturing facilities can't operate due to a lack of available energy. It's not an issue of air-freighting anymore, as many of our clients have had to do, but energy-related shutdowns are now reducing production of certain materials. And since we mentioned global shipping, with the relatively sudden shift from just-in-time to just-in-case supply chains, ships are now dropping anchor just outside of Savannah, Georgia. The issues that swamped West Coast ports for months have now made their way east.

There are plenty of bright spots within chemicals and plastics. Demand in many sectors remains strong, and we have little doubt that the creativity many of our clients and prospects have employed to weather the last 18 months will carry everyone through the latest challenges.

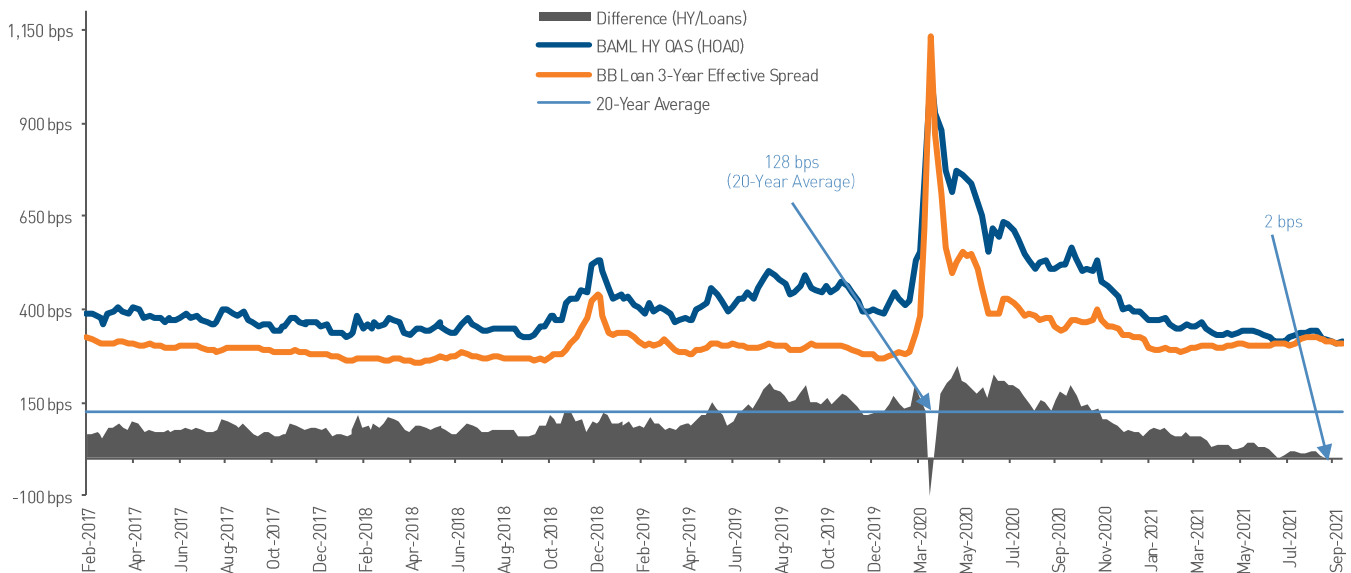


Source: U.S. Energy Information Administration

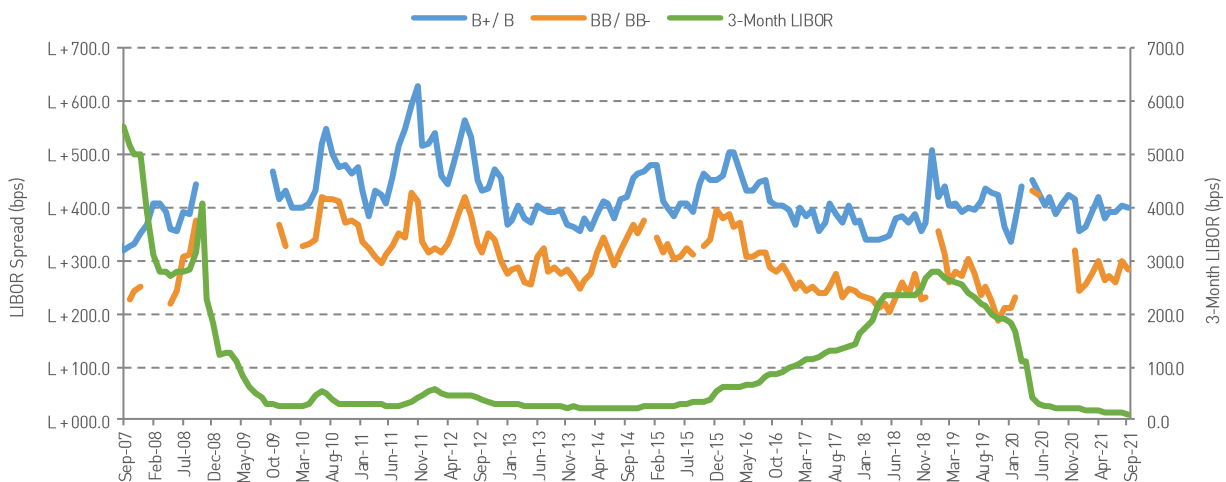
PRICING AND VOLUME UPDATE

- U.S. loan fund inflows continued to fall for the week ended September 29, posting a net inflow of roughly \$331.2 million versus \$362.8 million inflow the week prior.
- Despite the slowdown, inflow for the week ended September 29 marks the 10th straight week of gains for the asset class, following the only negative week of the year in mid-July.
- U.S. high-yield retail funds reported \$196.2 million of net inflows for the week ended September 29, following on a \$535.5 million inflow over the week prior. With inflows reported for three of the prior four weeks, the four-week average stands at positive \$235.7 million.

HY Spread Less BB Loans



Institutional Loan LIBOR Spreads



Sources: LCD, FRED

PRICING AND VOLUME UPDATE *(Continued)*

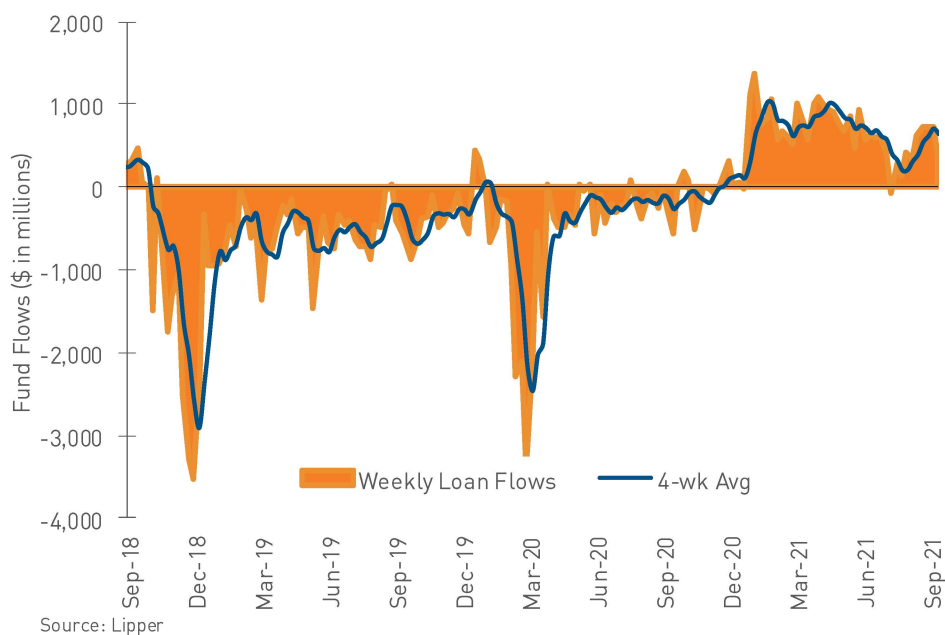
Average Secondary Loan Spreads Over LIBOR (2013 to Current)



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

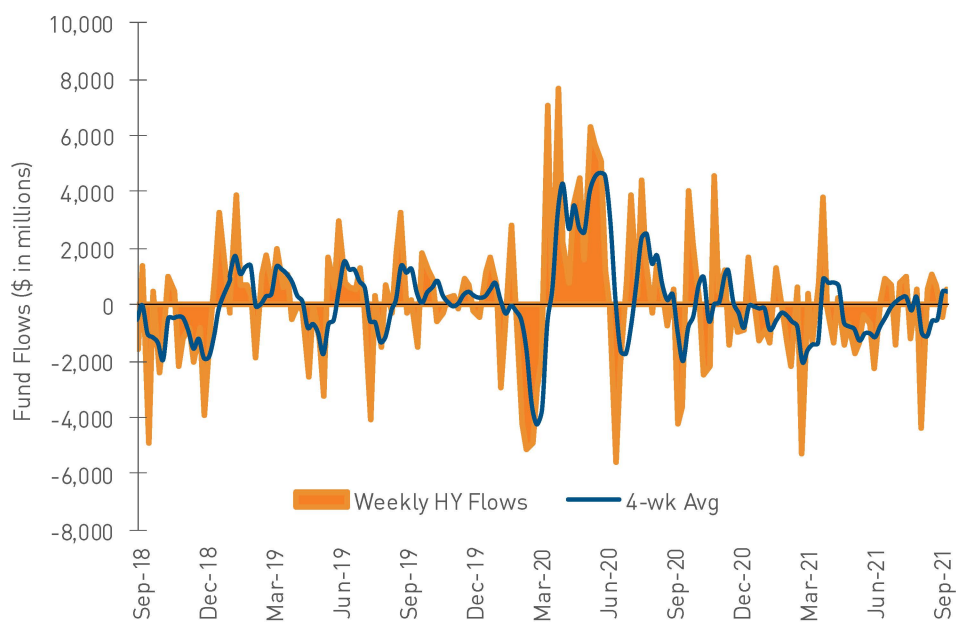
Source: LCD

Loan Fund Flows



PRICING AND VOLUME UPDATE *(Continued)*

HY Fund Flows



Source: Lipper

THIRD QUARTER LENDING ACTIVITY

Date	Company	Tranche Size (Ms)	Tranche Type	Spread	Term (Years)	Rating
9/28/21	Kao Corp	JPY 20,000	TL	-	5	- / -
9/25/21	Fuji Silysia Chemical Ltd	JPY 2,000	Revolver	-	1	- / -
9/24/21	Orion Engineered Carbons SARL	\$325	TLB	L + 225	7	Ba2 / -
		€ 275	TLB	E + 250	7	Ba2 / -
9/23/21	Takai Carbon Co Ltd	JPY 10,000	364-Day	-	1	- / -
9/20/21	Pactiv Evergreen	\$1,015	TLB	L + 350	7	B1 / B+
9/18/21	Mitsubishi Chemical Holdings Corp	JPY 30,000	Revolver	-	1	- / -
9/3/21	ICL Group Ltd	€250	Other Loan	E + 80	5	- / -
8/19/21	Mosaic Co	\$2,500	Revolver	L + 112.5	5	- / -
8/17/21	Sumitomo Chemical Co Ltd	JPY 40,000	Revolver	-	2	- / -
8/2/21	Sparta US Holdco LLC (PQ Performance Chemicals)	\$125	Revolver	L + 350	5	- / -
		\$750	TLB	L + 350	7	- / -
8/2/21	Sherwin-Williams Co	\$75	Other Loan	-	5	- / -
		\$125	Other Loan	-	2	- / -
		\$425	Other Loan	-	1	- / -
7/28/21	Chevron Phillips Chemical Co LLC	\$1,000	Other Loan	-	-	- / -
7/5/21	Sabik SK Nexlene Company Pte Ltd	\$70	Revolver	-	3	- / -

THIRD QUARTER BOND ACTIVITY

Date	Company	Tranche Size (Ms)	Coupon	Spread at Issue	Term (Years)	Rating
9/27/21	Consolidated Energy Finance SA	\$525	5.625%	T + 431	7	B3 / B+
9/7/21	Olympus Water US Holding Corp	\$815	4.250%	T + 314	7	B2 / B-
		\$400	6.250%	T + 508	8	Caa2 / CCC+
8/10/21	Avery Dennison Corp	\$300	0.850%	T + 40	3	Baa2 / BBB
		\$500	2.250%	T + 95	10	Baa2 / BBB
8/9/21	WR Grace Holdings LLC	\$1,155	5.625%	T + 441	8	B3 / CCC+
8/9/21	Ecolab Inc	\$685	2.750%	T + 83	34	Baa1 / A-
8/5/21	Westlake Chemical Corp	\$300	0.875%	T + 55	3NC1	Baa2 / BBB
		\$350	2.875%	T + 125	20	Baa2 / BBB
		\$600	3.125%	T + 140	30	Baa2 / BBB
		\$450	3.375%	T + 165	40	Baa2 / BBB
8/4/21	Chemours Co	\$650	4.625%	T + 367	8	B1 / B
8/3/21	Ashland LLC	\$450	3.375%	T + 220	10	Ba1 / BB+
7/29/21	Celanese US Holdings LLC	\$400	1.400%	T + 70	5	Baa3 / BBB

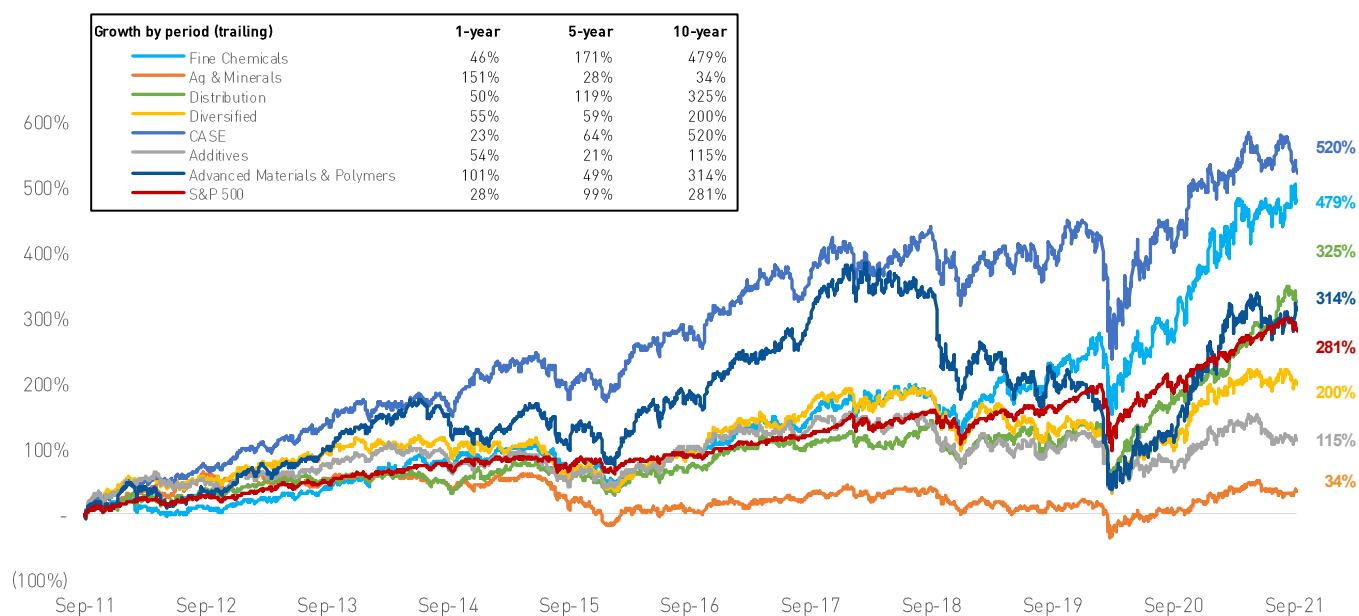
Sources: LoanConnector, PNC Debt Capital Markets

PUBLIC TRADING DATA

													LTM FCF
Company	Ticker	Stock Price	Market Cap.	Enterprise Value	Revenue	LTM EBITDA	EBITDA %	EV / LTM	Consensus 2022E EBITDA	EV/EBITDA	Net Debt	Net Debt / LTM EBITDA	Conversion / EBITDA
Fine Chemicals (Pharma, F&B, Electronic Chem.)													
Balchem	BCPC	\$145.07	\$4,696	\$4,753	\$744	\$171	23.0%	27.7x	\$204	23.3x	\$57	0.3x	80.0%
Cabot Microelectronics	CCMP	\$123.23	\$3,601	\$4,299	\$1,162	\$357	30.8%	12.0x	\$370	11.6x	\$698	2.0x	85.9%
Element Solutions	ESI	\$21.68	\$5,367	\$6,599	\$2,151	\$477	22.2%	13.8x	\$574	11.5x	\$1,233	2.6x	93.5%
Entegris	ENTG	\$125.90	\$17,072	\$17,670	\$2,083	\$610	29.3%	29.0x	\$802	22.0x	\$598	1.0x	72.1%
International Flavors & Fragrances	IFF	\$133.72	\$33,305	\$45,277	\$11,100	\$2,500	22.5%	18.1x	\$2,937	15.4x	\$11,833	4.7x	88.9%
Sensient	SXT	\$91.08	\$3,851	\$4,302	\$1,354	\$215	15.9%	20.0x	\$257	16.8x	\$451	2.1x	73.8%
Fine Chemicals Median			\$5,032	\$5,676	\$1,718	\$417	22.8%	19.1x	\$472	16.1x		2.0x	82.9%
Ag & Minerals													
AgroFresh	AGFS	\$2.16	\$113	\$473	\$166	\$59	35.4%	8.1x	\$61	7.7x	\$207	3.5x	95.2%
American Vanguard	AVD	\$15.05	\$465	\$616	\$509	\$48	9.5%	12.7x	\$65	9.5x	\$151	3.1x	79.5%
CF Industries Holdings	CF	\$55.82	\$12,007	\$17,888	\$4,585	\$1,742	38.0%	10.3x	\$2,258	7.9x	\$3,169	1.8x	78.7%
Compass Minerals International	CMP	\$64.40	\$2,192	\$3,319	\$1,477	\$288	19.5%	11.5x	\$301	11.0x	\$1,127	3.9x	71.8%
CVR Partners	UAN	\$69.70	\$744	\$1,349	\$369	\$88	23.9%	15.3x	na	na	\$605	6.8x	84.4%
FMC	FMC	\$91.56	\$11,784	\$15,069	\$4,674	\$1,205	25.8%	12.5x	\$1,437	10.5x	\$3,262	2.7x	87.0%
LSB Industries	LXU	\$10.21	\$810	\$1,592	\$402	\$84	20.9%	18.9x	\$150	10.6x	\$485	5.8x	67.4%
Minerals Technologies	MTX	\$69.84	\$2,346	\$2,919	\$1,728	\$327	18.9%	8.9x	\$388	7.5x	\$534	1.6x	74.2%
Mosaic	MOS	\$35.72	\$13,570	\$16,944	\$9,937	\$2,297	23.1%	7.4x	\$3,207	5.3x	\$3,196	1.4x	46.2%
Nutrien	TSX:NTR	\$65.02	\$37,106	\$46,600	\$21,861	\$3,915	17.9%	11.9x	\$6,249	7.5x	\$9,653	2.5x	62.6%
Ag & Minerals Median			\$2,269	\$3,119	\$1,603	\$307	22.0%	11.7x	\$388	7.9x		2.9x	76.5%
Distribution													
Brenntag	XTRA:BNR	\$93.39	\$14,429	\$16,439	\$14,637	\$1,090	7.4%	15.1x	\$1,578	10.4x	\$1,984	1.8x	80.4%
Hawkins Inc.	HWKN	\$34.88	\$740	\$842	\$635	\$85	13.4%	9.9x	\$95	8.9x	\$102	1.2x	78.7%
IMCD	ENXTAM:IMCD	\$191.53	\$10,898	\$11,844	\$3,629	\$378	10.4%	31.3x	\$485	24.4x	\$968	2.6x	97.5%
Univar	UNVR	\$23.82	\$4,071	\$6,415	\$8,594	\$637	7.4%	10.1x	\$756	8.5x	\$2,344	3.7x	83.5%
Distribution Median			\$7,484	\$9,130	\$6,111	\$508	8.9%	12.6x	\$620	9.6x		2.2x	81.9%
Diversified													
Albemarle	ALB	\$218.97	\$25,609	\$27,206	\$3,229	\$820	25.4%	33.2x	\$1,086	25.1x	\$1,397	1.7x	NM
Ashland	ASH	\$89.12	\$5,413	\$6,972	\$2,395	\$478	20.0%	14.6x	\$603	11.6x	\$1,559	3.3x	74.7%
Chemours	CC	\$29.06	\$4,800	\$7,897	\$5,662	\$1,090	19.3%	7.2x	\$1,397	5.7x	\$3,095	2.8x	79.2%
CSW Industrials	CSWI	\$127.70	\$2,009	\$2,303	\$490	\$115	23.6%	20.0x	\$138	16.7x	\$280	2.4x	93.0%
Eastman	EMN	\$100.74	\$13,679	\$18,885	\$9,370	\$1,824	19.5%	10.4x	\$2,297	8.2x	\$5,122	2.8x	78.9%
Ecolab	ECL	\$208.62	\$59,684	\$65,428	\$12,132	\$2,634	21.7%	24.8x	\$3,234	20.2x	\$5,717	2.2x	81.6%
Huntsman	HUN	\$29.59	\$6,567	\$8,223	\$7,039	\$868	12.3%	9.5x	\$1,261	6.5x	\$1,498	1.7x	64.6%
Ingevity	NGVT	\$71.37	\$2,821	\$3,926	\$1,336	\$456	34.1%	8.6x	\$467	8.4x	\$1,106	2.4x	80.6%
Koppers	KOP	\$31.26	\$667	\$1,533	\$1,679	\$235	14.0%	6.5x	\$236	6.5x	\$861	3.7x	55.7%
Olin Corp	OLN	\$48.25	\$7,744	\$11,231	\$7,232	\$1,496	20.7%	7.5x	\$2,224	5.0x	\$3,487	2.3x	85.4%
Ecovyst (fka PQ)	ECVT	\$11.66	\$1,597	\$2,978	\$1,140	\$258	22.6%	11.5x	\$267	11.2x	\$1,382	5.4x	60.1%
Schweitzer-Mauduit	SWM	\$34.66	\$1,090	\$2,311	\$1,225	\$214	17.4%	10.8x	\$268	8.6x	\$1,221	5.7x	85.3%
Trecora Resources	TREC	\$8.18	\$200	\$220	\$229	\$17	7.3%	13.1x	na	na	\$20	1.2x	15.8%
Tredegar	TG	\$12.18	\$408	\$523	\$773	\$96	12.5%	5.4x	na	na	\$115	1.2x	73.2%
Diversified Median			\$3,810	\$5,449	\$2,037	\$467	19.7%	10.6x	\$844	8.5x		2.4x	78.9%
CASE (Coatings, Adhesives, and Sealants)													
Axalta	AXTA	\$29.19	\$6,718	\$9,435	\$4,292	\$956	22.3%	9.9x	\$1,044	9.0x	\$2,669	2.8x	89.5%
Carlisle	CSL	\$198.79	\$10,329	\$11,697	\$4,439	\$725	16.3%	16.1x	\$1,063	11.0x	\$1,368	1.9x	85.9%
Chase Corporation	CCF	\$102.15	\$959	\$865	\$279	\$74	26.4%	11.8x	na	na	(\$94)	(1.3x)	97.2%
GCP Applied Technologies	GCP	\$21.92	\$1,611	\$1,508	\$967	\$144	14.9%	10.5x	\$169	8.9x	(\$106)	(0.7x)	77.7%
HB Fuller	FUL	\$64.56	\$3,393	\$5,011	\$3,158	\$433	13.7%	11.6x	\$514	9.8x	\$1,617	3.7x	78.6%
PPG Industries	PPG	\$143.01	\$33,944	\$40,792	\$15,682	\$2,556	16.3%	16.0x	\$3,280	12.4x	\$6,679	2.6x	86.2%
Quaker Houghton	KWR	\$237.72	\$4,250	\$5,039	\$1,618	\$273	16.9%	18.4x	\$310	16.3x	\$789	2.9x	93.7%
RPM International	RPM	\$77.65	\$10,077	\$12,507	\$6,106	\$875	14.3%	14.3x	\$914	13.7x	\$2,428	2.8x	82.0%
Sherwin-Williams	SHW	\$279.73	\$73,249	\$83,905	\$19,647	\$3,709	18.9%	22.6x	\$4,125	20.3x	\$10,656	2.9x	91.6%
CASE Median			\$6,718	\$9,435	\$4,292	\$725	16.3%	14.3x	\$979	11.7x		2.8x	86.2%
Additives													
Cabot	CBT	\$50.12	\$2,843	\$3,965	\$3,164	\$596	18.8%	6.7x	\$675	5.9x	\$983	1.6x	74.3%
Innospec	IOSP	\$84.22	\$2,075	\$2,018	\$1,270	\$159	12.5%	12.7x	\$217	9.3x	(\$58)	(0.4x)	78.2%
NewMarket	NEU	\$338.77	\$3,702	\$4,227	\$2,198	\$444	20.2%	9.5x	na	na	\$525	1.2x	78.0%
Orion Engineered Carbons	OEC	\$18.23	\$1,105	\$1,833	\$1,359	\$237	17.4%	7.7x	\$309	5.9x	\$728	3.1x	51.9%
Stapan Company	SCL	\$112.94	\$2,537	\$2,722	\$2,092	\$268	12.8%	10.1x	\$324	8.4x	\$183	0.7x	45.0%
Tronox	TROX	\$24.65	\$3,787	\$6,483	\$3,276	\$757	23.1%	8.6x	\$1,003	6.5x	\$2,642	3.5x	69.5%
Venator	VNTR	\$2.85	\$306	\$1,095	\$2,070	\$134	6.5%	8.2x	\$226	4.8x	\$789	5.9x	48.5%
Additives Median			\$2,537	\$2,722	\$2,092	\$268	17.4%	8.6x	\$317	6.2x		1.6x	69.5%
Advanced Materials & Polymers													
Advansix	ASIX	\$39.75	\$1,118	\$1,415	\$1,436	\$195	13.6%	7.3x	\$242	5.9x	\$298	1.5x	71.4%
Avient (fka PolyOne)	AVNT	\$46.35	\$4,232	\$5,598	\$4,319	\$542	12.5%	10.3x	\$633	8.8x	\$1,348	2.5x	84.4%
Celanese	CE	\$150.64	\$16,738	\$19,950	\$6,998	\$2,116	30.2%	9.4x	\$2,215	9.0x	\$2,853	1.3x	83.0%
Ferro	FOE	\$20.34	\$1,682	\$1,938	\$1,085	\$165	15.2%	11.8x	\$214	9.1x	\$248	1.5x	77.3%
Hexcel	HXL	\$59.39	\$4,980	\$5,773	\$1,213	\$135	11.1%	42.8x	\$323	17.9x	\$793	5.9x	85.6%
Kraton Corporation	KRA	\$45.64	\$1,467	\$2,463	\$1,711	\$266	15.5%	9.3x	\$312	7.9x	\$948	3.6x	70.3%
Rayonier Advanced Materials	RYAM	\$7.50	\$478	\$1,359	\$1,750	\$216	12.3%	6.3x	\$181	7.5x	\$881	4.1x	51.3%
Trinseo	TSE	\$53.98	\$2,096	\$4,191	\$3,998	\$554	13.9%	7.6x	\$666	6.3x	\$2,095	3.8x	86.6%
Westlake Chemical	WLK	\$91.14	\$11,680	\$14,417	\$9,079	\$2,112	23.3%	6.8x	\$2,602	5.5x	\$2,169	1.0x	76.1%
Advanced Mat. & Poly. Median			\$2,096	\$4,191	\$1,750	\$266	13.9%	9.3x	\$323	7.9x		2.5x	77.3%
Overall Median			\$3,787	\$4,753	\$2,092	\$433	18.8%	11.5x	\$544	9.0x		2.5x	78.8%

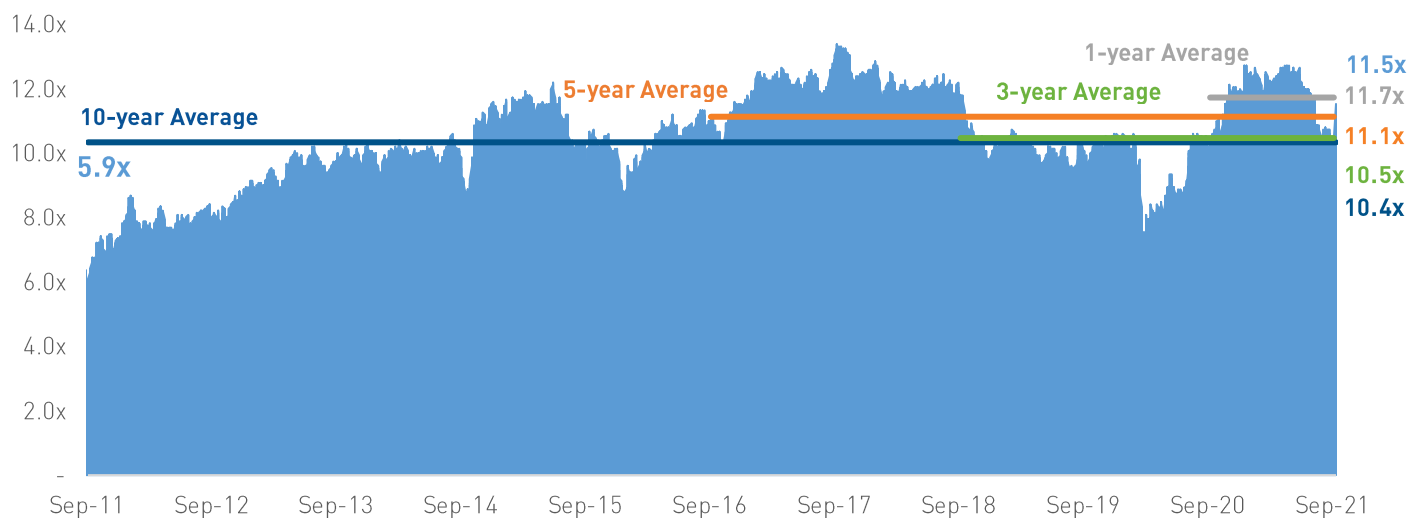
Source: S&P Capital IQ

SEGMENT PERFORMANCE



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

Average as of:	1-year	3-year	5-year	10-year
September 30, 2016	10.3x	10.4x	9.6x	8.6x
September 30, 2011	8.0x	7.3x	7.6x	7.8x



Source: S&P Capital IQ

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
9/30/21	Mitsubishi Chemical Corporation's Thermal and Emission Control Materials business	Apollo Global Management, Inc.	-	-	<ul style="list-style-type: none"> Apollo has agreed to acquire Mitsubishi Chemical's thermal and emission control materials business, which provides specialty heat-protective materials to industrial and automotive customers. Represents Apollo's second corporate carve out in Japan this year.
9/30/21	Guangxi Tianyuan New Energy Materials Co., Ltd.	Albemarle Corporation	\$200M	-	<ul style="list-style-type: none"> Albemarle has agreed to acquire Tianyuan, a China-based lithium converter. The plant has designed annual conversion capacity of up to 25,000 metric tons LCE and is capable of producing battery-grade lithium carbonate and lithium hydroxide. The plant is currently in the commissioning stage and is expected to begin commercial production in the first half of 2022.
9/30/21	Chemtrade Logistics Income Fund's Potassium Chloride and Vaccine Adjuvants businesses	Vertellus Holdings LLC (Pritzker Private Capital)	\$155M	-	<ul style="list-style-type: none"> Vertellus has agreed to acquire Chemtrade's potassium chloride and vaccine adjuvants businesses, located in Texas and New Jersey, respectively. The businesses have benefitted from recent capital investments, expansions and upgrades.
9/27/21	Arkema S.A.'s Epoxides business	Cargill, Incorporated	\$39M	-	<ul style="list-style-type: none"> Cargill has agreed to acquire Arkema's epoxides business, which produces bio-based and specialty epoxides in Blooming Prairie, Minnesota. Provides Cargill new growth potential in the industrial markets.
9/27/21	Huntsman Corporation (8.4% stake)	Starboard Value			<ul style="list-style-type: none"> Starboard Value has acquired an 8.4% stake in Huntsman, a Texas-based manufacturer of organic chemical products. Starboard Value, an activist hedge fund, reported that it bought the shares as they were undervalued. Huntsman looks forward to a constructive dialogue with Starboard Value.
9/27/21	Kraton Corporation	DL Chemical Co., Ltd. (DL Holdings Co., Ltd)	\$2.5B	8.6x	<ul style="list-style-type: none"> DL Chemical has agreed to acquire Kraton, a Houston-based public company and manufacturer of specialty polymer and high-value performance products derived from renewable resources. Under the terms of the agreement, Kraton stockholders will receive \$46.5 in cash for each share of Kraton common stock they own. Enables DL Chemical to provide customers with a wider range of innovative products and provides an ability to serve a diverse range of end markets in more than 70 countries worldwide.
9/17/21	Inpria Corporation (remaining 79% stake)	JSR Corporation	\$514M	-	<ul style="list-style-type: none"> JSR has agreed to acquire the remaining 79% stake in Inpria, an Oregon-based leading innovator of metal oxide photoresist design, development and manufacturing for extreme ultraviolet lithography. JSR participated in Inpria's funding rounds in 2017 and 2020 which resulted in JSR owning 21% of the company's outstanding shares. Improves JSR's already robust product portfolio of leading-edge material solutions.
9/17/21	Bangkok Synthetics Co., Ltd. (additional 5.37% stake from Bangkok Bank Public Company Limited)	SCG Chemicals Co., Ltd. (The Siam Cement Public Company Limited)	-	-	<ul style="list-style-type: none"> SCG has agreed to acquire an additional 5.37% stake in Bangkok Synthetics (BST), a Thailand-based producer of mixed C-4 products for downstream petrochemical industries, increasing its total stake in BST to 54.20%. Allows SCG to add additional value to its integrated chemicals chain.
9/15/21	Duromer Products Pty and DuroColour Vietnam Ltd.	Spell Capital Partners	-	-	<ul style="list-style-type: none"> Spell Capital has acquired Duromer Products and DuroColour Vietnam. The companies were purchased in tandem. Duromer Products is an Australia-based producer and supplier of thermoplastic polymers and compounds to the plastic industry. DuroColour Vietnam is a Vietnam-based regional manufacturer of color and additive masterbatches. Represents the second portfolio platform that Spell Capital owns in Australia. Grows Spell Capital's presence in the compounding and masterbatch industry.
9/14/21	Goodfellow	Battery Ventures	-	-	<ul style="list-style-type: none"> Battery Ventures has acquired Goodfellow, a United Kingdom-based specialist supplier of high-quality materials for research and development, prototyping and specialized manufacturing. Goodfellow has an extensive portfolio of more than 70,000 products, consisting of more than 700 different materials in multiple forms, including alloys, ceramics, composites, compounds, glass, metals and polymers. Battery Ventures has completed more than 60 industrial-related transactions across the U.S. and Europe since 2003.

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
9/14/21	Kem One (OpenGate Capital, LLC)	Apollo Global Management, Inc.	-	-	<ul style="list-style-type: none"> Apollo has agreed to acquire Kem One, a France-based producer of chlorochemicals and polyvinyl chloride resins. Kem One was created in 2012 as a spin-off of Arkema's divested vinyl business group.
9/13/21	Michael Foods' (Post Holdings) Egg Processing Plant in Hegins, Pennsylvania	Symrise AG	-	-	<ul style="list-style-type: none"> Symrise has agreed to acquire Michael Foods' egg processing plant in Hegins, Pennsylvania. Aligns with the strategy of IsoNova Technologies LLC, part of Symrise Flavor & Nutrition, and allows Symrise to keep up with the increasing demand of the pet food industry in the U.S.
9/13/21	RG Group	JM Polymers (Initiative & Finance)	-	-	<ul style="list-style-type: none"> JM Polymers has acquired a majority stake in RG Group, a France-based plastic recycling company.
9/10/21	Agrochemicals business of Meiji Seika Pharma Co., Ltd.	Mitsui Chemicals, Inc.	-	-	<ul style="list-style-type: none"> Mitsui Chemicals has agreed to acquire the agrochemicals business of Meiji Seika Pharma, a Japan-based manufacturer of ethical pharmaceuticals and agricultural chemicals. Enhances Mitsui Chemical's presence in the Japanese market and speeds up expansion into overseas agrochemical markets, where future growth is expected.
9/8/21	Axter Agrosience Inc. (remaining minority share)	Agro-100 Ltee	-	-	<ul style="list-style-type: none"> Agro-100 has acquired the remaining minority share of Axter Agrosience, a Canada-based company with expertise in liquid fertilizer products. This follows the acquisition by Agro-100 of a majority of Axter Agrosience shares in December 2020. Allows Agro-100 to expand its footprint in the North American market.
9/8/21	Materials Processing Facility in Benton, Arkansas	U.S. Vanadium LLC (Elysee Development Corp.)	-	-	<ul style="list-style-type: none"> U.S. Vanadium has acquired a materials processing facility in Benton, Arkansas. The facility, formerly owned by Saint-Gobain, will enable U.S. Vanadium to more efficiently grind and roast vanadium feedstock in preparation for chemical processing into a variety of vanadium-based products, including high-purity vanadium pentoxide and ultra-high-purity electrolyte for use in Vanadium Redox Flow Batteries.
9/8/21	Millennial Lithium Corp.	Contemporary Amperex Technology Co., Limited	\$311M	-	<ul style="list-style-type: none"> Contemporary Amperex Technology (CATL) has agreed to acquire Millennial Lithium, a Canada-based lithium miner, after outbidding Ganfeng Lithium. Follows CATL's purchase of stake in Neo Lithium Corp, North American Nickel and Pilbara Minerals, as the company seeks to shore up supply of key battery ingredients.
9/7/21	178,000-square-foot Chemical Manufacturing Facility in Corsicana, Texas of ChampionX Corporation	RPM International Inc.	-	-	<ul style="list-style-type: none"> RPM has acquired a 178,000-square-foot chemical manufacturing facility in Corsicana, Texas. The facility will be repurposed to act as a manufacturing campus for a number of RPM's operating companies. Allows RPM to expand production of several high-growth product lines while also streamlining manufacturing processes.
9/7/21	Anhydrous Ammonia Fertilizer Plant in Nebraska	NE Nitro Geneva LLC (aka Nebraska Nitrogen)	-	-	<ul style="list-style-type: none"> Nebraska Nitrogen has acquired an anhydrous ammonia fertilizer manufacturing plant in Geneva, Nebraska. The facility produces 36,000 tons of nitrogen-based fertilizer annually.
9/7/21	Specialty Resin & Chemical	Polytek [®] Development Corp. (Arsenal Capital Partners)	-	-	<ul style="list-style-type: none"> Polytek has acquired Specialty Resin & Chemical, a Michigan-based supplier of user-friendly mold making, casting and coating products. The two companies will continue to do business under their existing names.
9/7/21	FT Synthetics Inc.	GAF Materials LLC (Standard Industries Inc.)	-	-	<ul style="list-style-type: none"> GAF has agreed to acquire FT Synthetics, a Canada-based manufacturer and seller of synthetic underlayments for the steep slope roofing industry. Allows GAF to explore opportunities for expanded product offerings that support the entire building envelope.
9/7/21	Coating & Converting Technologies, LLC	ATP Adhesive Systems Group (Bregal)	-	-	<ul style="list-style-type: none"> ATP has acquired Coating & Converting Technologies, a Pennsylvania-based manufacturer of adhesive tapes, films, foams and substrates. Provides ATP the opportunity to expand its service offering, particularly to its North American customer base.
9/3/21	First Choice Ingredients, Inc.	Koninklijke DSM N.V.	\$453M	-	<ul style="list-style-type: none"> Royal DSM has agreed to acquire First Choice Ingredients, a Wisconsin-based supplier of dairy-based savory flavorings. Enables Royal DSM to continue building its health, nutrition and biosciences capabilities.
9/2/21	Actiplast	Paprec	-	-	<ul style="list-style-type: none"> Paprec has acquired Actiplast, a France-based supplier of PVC compounds. Enables Paprec to better meet the needs of plastics manufacturers with recycled PVC formulations.

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
9/1/21	Kobo Products, Inc. (25% stake)	Symrise AG	-	-	<ul style="list-style-type: none"> Symrise has agreed to acquire a 25% stake in Kobo, a New Jersey-based pigment and powder specialist, providing technology-based raw materials to the cosmetic industry. Helps Symrise expand its activities into inorganic UV filters and decorative cosmetics.
9/1/21	Prime Blend, LLC	Meridian Adhesives Group (Arsenal Capital Partners)	-	-	<ul style="list-style-type: none"> Meridian Adhesives has acquired Prime Blend, an Illinois-based manufacturer of water-based and hot melt adhesives and coatings. Represents 14th company added to Meridian's portfolio. Strengthens Meridian Adhesives' product and technology offerings in its Industrial division.
9/1/21	Ecolan Oy (Korona Invest)	Yara Suomi Oy	-	-	<ul style="list-style-type: none"> Yara has acquired Ecolan, a Finland-based producer of recycled fertilizers. Marks Yara's first acquisition in the organic fertilizer segment and helps the company play a bigger role in organic farming.
8/31/21	Performance Adhesives business of Ashland LLC	Arkema S.A.	\$1.7B	20.1x	<ul style="list-style-type: none"> Arkema has agreed to acquire the performance adhesives business of Ashland. Provides a portfolio of high performance adhesive solutions in high-value-added industrial applications and supports Bostik's long term growth ambition.
8/27/21	Casite (Intraco Corp.)	B'laster Holdings	-	-	<ul style="list-style-type: none"> B'laster has acquired Casite, a Michigan-based brand of premium maintenance chemicals and tire repair products. B'laster's brand portfolio now includes AC Avalanche, B'laster and Casite.
8/26/21	MANUCO SAS	EURENCO	-	-	<ul style="list-style-type: none"> EURENCO has acquired MANUCO, a France-based manufacturer of nitrocellulose. Enables EURENCO to secure the supply of nitrocellulose used in many of the company's products.
8/26/21	Henkel AG & Co. KGaA's Floor and Furniture Care Brand Portfolio	Triglan AG	-	-	<ul style="list-style-type: none"> Triglan has acquired Henkel's floor and furniture care brand portfolio.
8/24/21	Star Plastics, Inc.	Akoya Capital, LLC	-	-	<ul style="list-style-type: none"> Akoya has acquired Star Plastics, a West Virginia-based provider of custom engineered compounds and specialty products. Star Plastics will launch Akoya's custom engineered compounds, specialty products and elastomers platform and help to advance Star Plastics' expansion plans.
8/24/21	Shenzhen Landun Holding Co., Ltd.	Sika AG	-	-	<ul style="list-style-type: none"> Sika has acquired Shenzhen Landun, a China-based manufacturer of waterproofing systems. Provides Sika a platform to further grow and strengthen its position in the fast-growing Chinese waterproofing market.
8/23/21	Beraca Ingredientes Naturais S.A (remaining 70% stake)	Clariant AG	-	-	<ul style="list-style-type: none"> Clariant has agreed to acquire the remaining 70% stake in Bereca, a Brazil-based manufacturer of natural ingredients for the personal care sector. Clariant has held a 30% stake in the company since 2015. Provides Clariant opportunities for high-quality growth in its Care Chemicals business.
8/23/21	IFF's Microbial Control business	LANXESS Aktiengesellschaft	\$1.3B	13.0x	<ul style="list-style-type: none"> LANXESS has agreed to acquire IFF's microbial control business. IFF Microbial Control is one of the leading suppliers of antimicrobial active ingredients and formulations for material protection, preservatives and disinfectants. The microbial control business joined IFF through the combination with DuPont Nutrition & Biosciences earlier this year. Marks LANXESS' fourth acquisition this year and second largest ever for the company. Gives LANXESS access to new technologies and enhances the company's regulatory position through additional registrations.
8/23/21	AB Rötmotaverken	Nowocoat Industrial A/S	-	-	<ul style="list-style-type: none"> Nowocoat has acquired AB Rötmotaverken, a Sweden-based manufacturer of paint and varnish products. Provides Nowocoat increased capacity and new products to better serve customers.
8/23/21	Monomers, Polymers and European businesses of Deltech Holdings, LLC	SK Capital Partners, LP	-	-	<ul style="list-style-type: none"> SK Capital has acquired the monomers, polymers and European businesses of Deltech, a Louisiana-based leader in the production of high-performance aromatic monomers and specialized crystal polystyrene. SK Capital will work with management to expand the commercial applications for Deltech's highly specialized monomers and polymers.
8/23/21	MPR Services, Inc (Tessenderlo Kerley, Inc.)	ORG Chem Group LLC (Owner Resource Group, LLC)	-	-	<ul style="list-style-type: none"> Chem Group has acquired MPR Services, a Texas-based provider of reclamation services. Expands Chem Group's presence within the amines reclamation industry.

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
8/19/21	European Industrial Coatings Business of Sika AG	The Sherwin-Williams Company	-	-	<ul style="list-style-type: none"> Sherwin-Williams has agreed to acquire the European industrial coatings business of Sika. Gives Sherwin-Williams scale, unique technology, a strong sales and marketing team, technical services capabilities and strategically located manufacturing.
8/19/21	APAC business of Emery Oleochemicals and Emery Specialty Chemicals (Sime Darby Plantation and PTT Global Chemical)	Edenor Technology (Mega First Corp and 9M Technologies)	\$9M	-	<ul style="list-style-type: none"> Edenor Technology has agreed to acquire the APAC business of Emery Oleochemicals and Emery Specialty Chemicals. Emery Oleochemicals, Emery Specialty Chemicals and its subsidiaries, collectively referred to as Emery Group, is a joint venture between Sime Darby Plantation and PTT Global Chemical. The divestment is conditional upon the restructuring of Emery Group into separate standalone groups in respect of its Asia Pacific business and the North America and Europe business.
8/18/21	Ace Elastomer Corporation	AirBoss of America Corp.	\$42M	-	<ul style="list-style-type: none"> AirBoss has agreed to acquire Ace Elastomer, a South Carolina-based custom rubber compounder. Expands AirBoss' reach into the U.S. South and Mid-West and increases its proprietary color and specialty rubber compounding capacity.
8/17/21	National Petrochemical Industrial Company (16% stake)	Alujain Holding Corporation	\$217M	-	<ul style="list-style-type: none"> Alujain has agreed to acquire a 16% stake in National Petrochemical Industrial Company, a Saudi Arabia-based producer of a wide range of polypropylene homopolymers and random heterophasic copolymers.
8/16/21	Oxiteno S.A. Indústria e Comércio (Ultrapar Participações S.A.)	Indorama Ventures Public Company Limited	\$1.3B	-	<ul style="list-style-type: none"> Indorama Ventures has agreed to acquire Oxiteno, a Brazil-based integrated surfactants producer, catering to highly attractive end-use markets in LATAM. Provides Indorama Ventures a unique portfolio in high-value surfactants and significantly extends its existing Integrated Oxides and Derivatives business.
8/16/21	Rhizophora's Nutrients business	The Scotts Miracle-Gro Company	\$34M	-	<ul style="list-style-type: none"> Scotts Miracle-Gro has acquired Rhizophora's leading nutrients business including its Terpinator and Purpinator brands. Extends the Hawthorne Gardening Company product portfolio.
8/16/21	Itelyum	Stirling Square Capital Partners and Deutsche Beteiligungs AG	-	-	<ul style="list-style-type: none"> Stirling Square, in partnership with Deutsche Beteiligungs, has agreed to acquire Itelyum. Stirling Square's Fourth Fund and its co-investors will acquire a majority stake and Deutsche Beteiligungs will acquire a minority stake from Stirling Square's Third Fund. Itelyum is an Italy-based leading European Circular Economy player, specialized in recycling complex streams of hazardous liquid waste. Represents the eighth platform investment by Stirling Square's Fourth Fund.
8/16/21	Arclin, Inc. (Lone Star Funds)	The Jordan Company, L.P.	-	-	<ul style="list-style-type: none"> The Jordan Company has agreed to acquire Arclin, a Georgia-based provider of highly technical, engineered products for the residential building products market and other industries. Arclin's senior management team will maintain a significant equity stake in Arclin and continue to lead the company going forward.
8/11/21	Breasley Pillows Ltd. (unknown stake)	Whitemeadow Group Holdings Limited	-	-	<ul style="list-style-type: none"> Whitemeadow has acquired an unknown stake in Breasley, one of the largest independent foam fillings converters in the United Kingdom. Secures consistent and high-quality foam supply for Whitemeadow and allows Breasley to invest in the latest technology in foam filling conversion.
8/11/21	IPS Corporation (Cypress Performance Group, LLC)	Centerbridge Partners, L.P.	-	-	<ul style="list-style-type: none"> Centerbridge has agreed to acquire IPS, a California-based manufacturer of specialized, highly engineered industrial products including solvent cements, rough plumbing and roofing products and structural adhesives. Several significant shareholders of Cypress including the Sherman family and Shumway Capital have agreed to continue as shareholders in IPS alongside Centerbridge.
8/10/21	Seal Science, Inc	Integrated Polymer Solutions, Inc. (Arcline Investment Management)	-	-	<ul style="list-style-type: none"> Integrated Polymer Solutions (IPS) has acquired Seal Science, a California-based designer and manufacturer of highly engineered elastomeric sealing solutions for long-lived aerospace, naval, medical and industrial applications. Aligns with IPS' strategy of creating a world-class material science business.
8/10/21	Aurora Plastics, LLC (Wind Point Advisors, LLC and Ontario Teachers' Pension Plan)	Nautic Partners, LLC	-	-	<ul style="list-style-type: none"> Nautic Partners, in partnership with management, has acquired Aurora Plastics, an Ohio-based producer of polyvinyl chloride and other customized polymer compounds for customers across North America. Wind Point and Ontario Teachers' acquired Aurora in 2016.

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
8/9/21	Bexel Internacional S.A. de C.V.	Sika AG	-	-	<ul style="list-style-type: none"> Sika has acquired Bexel, a Mexico-based manufacturer of tile adhesives and stuccos. Strengthens Sika's position in the Mexican mortar market and significantly extends its manufacturing footprint via Bexel's five production plants.
8/9/21	Safe Foods Corporation	Packers Sanitation Services Inc. (Blackstone Inc.)	-	-	<ul style="list-style-type: none"> Packers Sanitation (PSSI) has agreed to acquire Safe Foods, an Arkansas-based food safety performance management company and global leader in antimicrobial technology. Part of PSSI's strategic growth plan to enhance its food safety program and offer new antimicrobial solutions to help customers grow their business.
8/6/21	Chem-Ecol Ltd	Environmental 360 Solutions Inc.	-	-	<ul style="list-style-type: none"> Environmental 360 (E360S) has acquired Chem-Ecol, a Canada-based manufacturer and specialty blender of new and reclaimed industrial oils and lubricants. Represents E360S' 21st acquisition since inception.
8/5/21	Tasman Chemicals	Diversey Holdings, Ltd.	-	-	<ul style="list-style-type: none"> Diversey has agreed to acquire Tasman, an-Australia-based manufacturer of professional hygiene and cleaning solutions to the institutional and food and beverage sectors. Provides Diversey a strong manufacturing footprint, allowing for greater operational flexibility, and allows the company to grow in the Australia and New Zealand markets.
8/5/21	Astier Demarest SA (unknown majority stake)	Robertet SA	-	-	<ul style="list-style-type: none"> Robertet has acquired an unknown majority stake in Astier Demarest, a France-based company focused on sourcing and distributing raw materials for the perfumery, cosmetics, aromatherapy and food flavoring markets. Strengthens Robertet's competitive edge in the sustainable sourcing of natural products.
8/3/21	Adam Gates & Company LLC	Epolin Chemicals LLC (Chroma Color Corporation - Arsenal Capital Partners)	-	-	<ul style="list-style-type: none"> Epolin has acquired Adam Gates & Company, a New Jersey-based manufacturer of near-infrared and laser absorbing dyes that provide optimal absorbance and transmission properties. Enables Epolin to provide customers a wider selection of products, additional supply forms and enhanced technical expertise.
8/2/21	Pure Air Control Services, Inc.	RPM International Inc	-	-	<ul style="list-style-type: none"> RPM has acquired Pure Air, a Florida-based provider of indoor air quality solutions. Pure Air will become part of Tremco Roofing and Building Maintenance's affiliated construction services company, Weatherproofing Technologies Inc.
8/2/21	JeNaCell GmbH	Evonik Industries AG	-	-	<ul style="list-style-type: none"> Evonik has acquired JeNaCell, a Germany-based biotech company. In 2017, JeNaCell launched its first product epicite, a medical wound dressing for the treatment of chronic wounds, surgical wounds and burns that is based on biotechnologically derived cellulose. Expands Evonik's biomaterials portfolio.
8/2/21	Serra do Salitre Phosphates Project in Brazil from Yara	Eurochem Group AG (AIM Capital S.E.)	\$410M	-	<ul style="list-style-type: none"> Eurochem has agreed to acquire Yara's Serra do Salitre phosphates project in Brazil. The project is scheduled to bring on stream a 1 million metric tons/year phosphates plant, producing MAP/NP, as well as SSP and TSP, in 2023.
8/2/21	INEOS' Sulfur Chemicals business	International Chemical Investors Group	-	-	<ul style="list-style-type: none"> International Chemical Investors Group (ICIG) has acquired INEOS' sulfur chemicals business. The business will become part of the WeylChem Group of Companies, the fine chemicals platform owned by ICIG. The combined business, which includes an existing sulphuric acid and oleum plant in Northern France, will become one of the leading European sulfur chemicals companies.
8/2/21	Egypt Basic Industries Corporation (15% stake from a consortium led by KBR, Inc.)	Fertiglobe Holding Ltd (OCI N.V.)	\$43M	-	<ul style="list-style-type: none"> Fertiglobe has agreed to acquire a 15% stake in Egypt Basic Industries Corporation (EBIC), a 0.75 million metric ton per year anhydrous ammonia plant from a consortium led by KBR, Inc. and including JGC Holdings Corporation, Mitsubishi Corporation and ITOCHU Corporation. Brings Fertiglobe's stake in EBIC to 75%.
8/2/21	Fabpro Polymers	MBCC Group (Lone Star Funds)	-	-	<ul style="list-style-type: none"> MBCC Group has acquired Fabpro, a Kansas-based developer and manufacturer of synthetic polypropylene fibers for reinforced concrete and other applications in North America. Improves MBCC Group's position in innovative and sustainable mixed solutions.
8/1/21	Sun Chemical's Performance Pigments Plant in South Carolina	DCL Corporation (H.I.G. Capital)	-	-	<ul style="list-style-type: none"> DCL has acquired Sun Chemical's performance pigments plant in Goose Creek, South Carolina. Includes the production and sales of the perylene and quinacridone product portfolios, along with select specialty products. Represents DCL's second add-on acquisition since H.I.G.'s investment in September 2016. DCL previously acquired LANSCO Colors in April 2018.

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
7/30/21	Ind-Swift Laboratories Limited's API business division	PI Industries Limited	\$206M	-	<ul style="list-style-type: none"> PI Industries has agreed to acquire Ind-Swift's API business division. The transaction was a slump sale by PI Industries to raise funds to facilitate repayment of existing debt exposure.
7/28/21	Next Beauty	Givaudan SA	-	-	<ul style="list-style-type: none"> Givaudan has invested in the series A funding round of Next Beauty, a China-based leading incubator for emerging fragrance and beauty brands looking to grow in the country. Provides Givaudan with further access into the high growth Chinese fragrance and beauty market and aligns with the company's 2025 strategy.
7/28/21	Assets of Oxis Energy Limited	Johnson Matthey Plc	-	-	<ul style="list-style-type: none"> Johnson Matthey (JM) has acquired the assets of Oxis Energy, a United Kingdom-based manufacturer of Sulphur polymer rechargeable batteries. Accelerates the scale-up of JM's growing green hydrogen business by expanding the company's ability to develop, test and manufacture catalyst coated membranes and advanced materials for electrolyzers.
7/27/21	Midori USA, Inc (remaining 61.5% stake)	Koninklijke DSM N.V.	\$63M	-	<ul style="list-style-type: none"> DSM has acquired a remaining 61.5% stake in Midori USA, a Massachusetts-based biotechnology company with a novel precision platform developing breakthrough targeted eubiotics that improve the health and environmental impact of animals. Midori's platform is synergetic with DSM's bioscience capability and current eubiotics portfolio, which was further strengthened through the acquisition of Biomin (as part of the Erber Group).
7/26/21	The Chemours Company's Mining Solutions business	Draslovka Holding a.s.	\$520M	-	<ul style="list-style-type: none"> Draslovka has agreed to acquire Chemours' mining solutions business which comprises sodium cyanide production. Follows announcement that Draslovka will acquire Sasol's sodium cyanide business. Marks Draslovka's first major investment in the U.S. and advances the company's international expansion plans.
7/26/21	Normerica, Inc.	Minerals Technologies Inc.	\$148M	-	<ul style="list-style-type: none"> Minerals Technologies has acquired Normerica, a Canada-based manufacturer of pet products. Broadens Minerals Technologies' customer base and adds strategic manufacturing locations in North America.
7/23/21	KMTX LLC	Monument Chemical	-	-	<ul style="list-style-type: none"> Monument Chemical has acquired KMTX, a Texas-based toll distillation provider. The Port Arthur site is MSTA-compliant and has five full-time distillation trains that can process up to 1 billion pounds per year through both batch and continuous distillation processes. Allows Monument Chemical to add new technologies to its portfolio and expands the company's footprint on the Gulf Coast.
7/23/21	Swania SAS (Milestone Investisseurs and Individual Shareholders)	Henkel AG & Co. KGaA	-	-	<ul style="list-style-type: none"> Henkel has acquired Swania, a France-based independent player in the ecological home care market. The portfolio comprises the sustainable brand Maison Verte, which offers products for laundry, homecare and dish washing. Adds fast-growing and highly profitable brands to Henkel's existing Laundry and Home Care business.
7/23/21	Majority of SI Group's Industrial Resins business (SK Capital Partners)	ASK Chemicals (Rhône Group, LLC)	-	-	<ul style="list-style-type: none"> ASK has agreed to acquire the majority of SI Group's global Industrial Resins business. The transaction includes SI Group's industrial resins products and manufacturing sites in Rio Claro, Brazil; Ranjagaon, India; and Johannesburg, South Africa, as well as licensed technology and multiple tolling agreements. SI Group will carve out related businesses at these sites, including the manufacture of Rubber and Adhesive, Oilfield and Surfactants, and Foundry products in Brazil. The company will also retain the Industrial Resins businesses in the U.S. and China.
7/22/21	Jacob Holm & Sons AG	Glatfelter Corporation	\$339M	8.0x	<ul style="list-style-type: none"> Glatfelter has agreed to acquire Jacob Holm & Sons, a Switzerland-based manufacturer of spunlace nonwoven fabrics for critical cleaning, high-performance materials, personal care, hygiene and medical applications. Provides Glatfelter four additional manufacturing facilities and six sales offices located in the Americas, Europe and Asia.
7/21/21	American Hydrotech, Inc.	Sika AG	-	-	<ul style="list-style-type: none"> Sika has acquired American Hydrotech, an Illinois-based liquid membrane manufacturer and provider of full-system roofing and waterproofing solutions. Enhances Sika's roofing and waterproofing portfolio and complements the company's sustainability focus. With this acquisition, Sika will become the number one supplier of green roofs in North America.

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
7/21/21	Alterra Energy LLC (unknown stake)	Ravago S.A.	-	-	<ul style="list-style-type: none"> Ravago has acquired an unknown stake in Alterra Energy, an Ohio-based innovative advanced recycling technology company. Ravago will be a strategic partner in supplying pre-processed waste plastic to Alterra Energy's Akron, Ohio, facility.
7/21/21	gpi green partners international GmbH & Co. KG	Evergreen Garden Care (UK) Ltd. (Exponent Private Equity)	-	-	<ul style="list-style-type: none"> Evergreen Garden Care has acquired gpi green partners, a Germany-based leader in the production and marketing of fertilizers and plant protection products. Transaction also includes gpi's shareholding in GPL Green Partners Logistics GmbH, a raw materials logistics company, and in NFI NorthFertilizerIndustry GmbH & Co. KG, a supplier of organic and organic-mineral fertilizer mixtures.
7/19/21	Assets of Flavor Solutions Inc.	Sensient Technologies Corporation	-	-	<ul style="list-style-type: none"> Sensient has acquired the assets of Flavor Solutions, a New Jersey-based custom product and flavor development company. Allows Sensient to expand its flavor portfolio and add key technologies to strengthen its technical solution capabilities.
7/19/21	Aristech Surfaces LLC (Falcon Private Holdings, LLC)	Trinseo S.A.	\$445M	7.0x	<ul style="list-style-type: none"> Trinseo has agreed to acquire Aristech, a Kentucky-based manufacturer and provider of polymethyl methacrylates (PMMA) continuous cast and solid surface sheets, serving the wellness, architectural, transportation and industrial markets. Strengthens Trinseo's position in acrylic solutions and drives expansion into wellness, niche leisure and architectural end markets in key geographies, including Asia.
7/19/21	Blanchon SA (Abénex Capital SA)	IK Investment Partners, Abénex Capital SA and management	=	-	<ul style="list-style-type: none"> IK Investment Partners has agreed to invest in Blanchon, a France-based manufacturer of woodcare solutions. Abénex will significantly reinvest in the new transaction alongside IK and the management team.
7/19/21	Biotrop Soluções Biológicas (minority stake from Aqua Capital)	GIC Pte. Ltd.	-	-	<ul style="list-style-type: none"> GIC has agreed to acquire a minority stake in Biotrop, a Brazil-based biological ag inputs company. Aqua Capital will remain the majority owner.
7/19/21	Henry Company LLC (American Securities LLC)	Carlisle Companies Incorporated	\$1.6B	13.2x	<ul style="list-style-type: none"> Carlisle has acquired Henry Company, a California-based provider of building envelope systems that control the flow of water, vapor, air and energy in a building. Strengthens the position of Carlisle's construction materials business.
7/17/21	Tristar Intermediates Pvt. Ltd.	Rossari Biotech Limited	\$16M	-	<ul style="list-style-type: none"> Rossari has agreed to acquire Tristar, an India-based manufacturer and supplier of preservatives, aroma chemicals and home and personal care additives. Provides Rossari with an enhanced portfolio of products, stronger presence in international markets and access to new technologies.
7/16/21	Millennial Lithium Corp. (Million Surge Holdings Limited and others)	Ganfeng Lithium Co., Ltd.	\$290M	-	<ul style="list-style-type: none"> Ganfeng has agreed to acquire Millennial Lithium, a Canada-based company engaged in the development of lithium mineral properties. Millennial Lithium's 100%-owned Pastos Grandes Project is an attractive, advanced stage lithium project and is highly complementary to Ganfeng's existing footprint in Argentina.
7/14/21	DeForest Enterprises (Chemical Services Group) and ParaFlow Energy Solutions (Chemical Services Group)	Verdant Specialty Solutions (OpenGate Capital)	-	-	<ul style="list-style-type: none"> Verdant has acquired DeForest Enterprises and ParaFlow Energy Solutions. DeForest Enterprises is a specialty surfactants company with a range of chemistries. ParaFlow Energy Solutions provides products applicable to paraffin mitigation in upstream crude oil production and technologies for use in demulsifier applications. Both companies are based in Florida. Expands Verdant's portfolio of surfactants and specialty solutions for the industrial, institutional and consumer segments.
7/13/21	Allnex (Advent International)	PTT Global Chemical Public Company Limited	\$4.8B	12.2x	<ul style="list-style-type: none"> PTT Global Chemical (PTTGC) has agreed to acquire Allnex, a Germany-based specialty chemical company focused on industrial coating resins. Allnex was originally formed from the combination of Cytec Coating Resins and Nuplex. PTTGC will further strengthen Allnex's market access in the APAC region and support investments in innovative and green technologies.
7/13/21	AOC (CVC Capital Partners)	Lone Star Americas Acquisitions, Inc. (Lone Star Funds)	\$2.4B	-	<ul style="list-style-type: none"> Lone Star Americas has agreed to acquire AOC, a Netherlands-based CASE and Colorants leader, producing and formulating unsaturated polyester resins, vinyl ester resins and other solutions for a wide range of applications. Aligns well with Lone Star's portfolio of specialty chemical and manufacturing businesses.

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
7/13/21	vliepa GmbH	Owens Corning	-	-	<ul style="list-style-type: none"> Owens Corning has acquired vliepa, a Germany-based company specializing in the coating, printing and finishing of nonwovens, paper and film for the building materials industry. Broadens Owens Corning's global nonwovens portfolio to better serve European customers and accelerate growth of building and construction market applications in the region.
7/12/21	Sasol Limited's Sodium Cyanide business	Draslovka Holding a.s.	\$101M	-	<ul style="list-style-type: none"> Draslovka has agreed to acquire Sasol's sodium cyanide business. Key feedstocks, utilities and site services will be supplied by Sasol on an arm's length basis. Draslovka will use its expertise in the cyanide business to bring new technologies and capabilities to the process, ensuring a stable supply of cyanide to the mining industry.
7/12/21	Nobel Group	Hextar Global Bhd	-	-	<ul style="list-style-type: none"> Hextar has acquired Nobel Group, comprising Nobel Synthetic Polymer Sdn Bhd and Nobel Scientific Sdn Bhd. Nobel Group is a Malaysia-based chemical derivatives, coating and related products manufacturer and supplier. The acquisition comes with a profit guarantee of an aggregate of RM42 million over three years which translates to an after-tax profit of RM14 million per year. Provides Hextar with an immediate presence in the specialty chemical industry and complements the company's agrochemicals segment.
7/8/21	Terra Nova Insumos Agrícolas LTDA	Nutrien Ltd.	-	-	<ul style="list-style-type: none"> Nutrien has agreed to acquire Terra Nova, a Brazil-based retailer of agricultural inputs. Adds nine stores to Nutrien's network in Brazil, for a total of 33 units.
7/7/21	Ascensus Specialties (Wind Point Partners)	New Mountain Capital and Wind Point Partners	-	-	<ul style="list-style-type: none"> New Mountain Capital has acquired Ascensus Specialties, a Washington-based provider of specialty materials for use in critical life sciences and specialties markets and applications. Wind Point Partners, the former majority shareholder, will reinvest in the Company in partnership with New Mountain Capital through a special purpose vehicle raised in association with the transaction.
7/7/21	U-POL Limited (Graphite Capital Management LLP and others)	Axalta Coating Systems Ltd.	\$590M	=	<ul style="list-style-type: none"> Axalta has agreed to acquire U-POL, a United Kingdom-based manufacturer of paints, protective coatings and accessories for the automotive aftermarket. Axalta will accelerate growth of U-POL's products by expanding market access through Axalta's existing sales and distribution channels while leveraging U-POL's distribution channels to extend the reach of its Refinish Coatings portfolio.
7/7/21	Comet S.r.l. (30% stake from BHF S.r.l.)	NB Aurora Holdings S.à.r.l.	\$43M	-	<ul style="list-style-type: none"> NB Aurora has acquired a 30% stake in Comet, an Italy-based manufacturer of organic rubber and silicone compounds for various industrial sectors. Comet's annual productions stand today at approximately 30,000 tons of compounds.
7/6/21	Solenis International LLC (Clayton, Dübiller & Rice, LLC and BASF SE)	Platinum Equity, LLC	\$5.3B	-	<ul style="list-style-type: none"> Platinum Equity has agreed to acquire Solenis, a Delaware-based leader in supplying innovative specialty chemicals and services for process, functional and water treatment applications to consumer and industrial markets. As part of the transaction, Solenis is expected to merge with Sigura Water, an existing Platinum Equity portfolio company, for a total combined transaction value of approximately \$6.5 billion.
7/6/21	LASCO Fittings, Inc. (Aalberts, NV.)	Westlake Chemical Corporation	-	-	<ul style="list-style-type: none"> Westlake has agreed to acquire LASCO, a Tennessee-based designer, engineer and manufacturer of PVC fittings. Deal comes two weeks after the \$2.15 billion acquisition of Boral Industries' North American building products business.
7/5/21	Technical Foam Services	The Vita Group (Strategic Value Partners)	-	-	<ul style="list-style-type: none"> Vita has acquired Technical Foam Services, a United Kingdom-based foam conversion business. Provides Vita enhanced technical foam conversion capacity.
7/5/21	Indevex Watertech AB	Kersia (IK Investment Partners)	-	-	<ul style="list-style-type: none"> Kersia has acquired Indevex Watertech, a Sweden-based supplier and specialist of innovative food safety products and services. Enables Kersia to cover the Scandinavian food safety sector from farm to fork and better serve international customers.
7/2/21	Polynt-Reichhold (additional stake from Investindustrial)	Black Diamond Capital Management, L.L.C.	-	=	<ul style="list-style-type: none"> Black Diamond has agreed to acquire the remaining stake in Polynt-Reichhold, a United Kingdom-based vertically-integrated global specialty chemical manufacturer. Following the completion of the transaction, Black Diamond will become the controlling shareholder. Black Diamond and Investindustrial became partners in Polynt-Reichhold after the successful merger of Polynt and Reichhold in May 2017.

THIRD QUARTER 2021 CHEMICALS TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
7/2/21	Zodiac Enterprises LLC Assets in Texas	BASF SE	-	-	<ul style="list-style-type: none"> BASF has acquired Zodiac Enterprises assets in Caldwell, Texas. The site recycles precious metals from industrial scrap, primarily chemical catalysts. Complements BASF's precious metal recycling operations in Seneca, South Carolina.
7/1/21	Champion Brands, LLC	PLZ Aeroscience Corporation (Pritzker Private Capital)	-	-	<ul style="list-style-type: none"> PLZ has acquired Champion Brands, a Missouri-based manufacturer of specialty lubricants for the automotive and industrial markets. Expands PLZ's automotive and industrial offering in North America and enables the company to better serve customers with a comprehensive suite of aerosol and non-aerosol products.
7/1/21	b.kolormakeup & skincare (25% stake)	Givaudan SA	-	-	<ul style="list-style-type: none"> Givaudan has acquired a 25% stake in b.kolor, an Italy-based company specialized in developing and producing end to end products in make-up and skin care for consumer packaged goods and luxury customers. Givaudan has the option to acquire a controlling stake in b.kolor after a period of three years. Expands Givaudan's capabilities in fragrance and beauty.
7/1/21	Pillaert-Mekoson Group (Origin Enterprises plc)	Brokking Holding BV	\$18M	-	<ul style="list-style-type: none"> Brokking has agreed to acquire Pillaert-Mekoson, a Belgium-based manufacturer of standard and prescription fertilizers. Provides Brokking further scale to its fertilizer operations in the region.
7/1/21	Renasci N.V. (10% stake)	Borealis AG	-	=	<ul style="list-style-type: none"> Borealis has acquired a 10% stake in Renasci, a Belgium-based provider of innovative recycling solutions and creator of the novel Smart Chain Processing concept. Supports Borealis' integrated approach to achieve a true circular economy of plastics in the most eco-efficient way.
7/1/21	Devan (Pentahold)	Pulcra Chemicals GmbH	-	-	<ul style="list-style-type: none"> Pulcra Chemicals has acquired Devan, a Belgium-based manufacturer of specialty chemicals and processes for the textile markets. Marks the first acquisition for Pulcra Chemicals, a German producer of textile, fiber and leather auxiliaries.
7/1/21	NOVA Chemicals' Ethylene Storage Business and Trading Hub	Enterprise Product Partners L.P.	-	-	<ul style="list-style-type: none"> Enterprise has acquired NOVA Chemicals' ethylene storage business and trading hub in Mont Belvieu, Texas. Provides Enterprise ownership of the largest ethylene market hub in Texas since it was established in 2001 and complements the company's own growing ethylene network in the region.
7/1/21	Magna Colours Limited	Avient Corporation	\$48M	-	<ul style="list-style-type: none"> Avient Corporation has acquired Magna Colours, a United Kingdom-based market leader in sustainable, water-based inks technology for the textile screen printing industry. The MagnaColours® materials will join Avient's existing specialty inks portfolio, alongside brands such as Wilflex® and Rutland®.
7/1/21	Atotech Limited	MKS Instruments, Inc.	\$6.7B	19.2x	<ul style="list-style-type: none"> MKS has agreed to acquire Atotech, a United Kingdom-based specialty chemicals technology company and market leader in advanced electroplating solutions, only five months post going public. Accelerates interconnect solutions for customers to address increasing miniaturization demands that enables integration of chips to devices.
7/1/21	Axxence Aromatic GmbH	capiton AG	-	-	<ul style="list-style-type: none"> capiton has acquired Axxence Aromatic, a Germany-based manufacturer and supplier of natural ingredients for the flavor and fragrance compounding industry. Represents capiton's third transaction in the chemicals sector.
6/28/21	Verkor (unknown stake)	Arkema S.A.	-	-	<ul style="list-style-type: none"> Arkema has acquired a stake in Verkor, a France-based startup specialized in the production of high performance batteries. Strengthens Arkema's development in next generation batteries and clean mobility.

THIRD QUARTER 2021 PLASTIC CONVERTER TRANSACTIONS

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
9/23/21	Baobag (iXO Private Equity and Bpifrance)	LBO France, BNP Paribas Développement, AfricInvest and management	-	-	<ul style="list-style-type: none"> LBO France, BNP Paribas Développement, AfricInvest and management have acquired Baobag, a France-based manufacturer of soft packaging and flexible intermediate bulk containers. The shared objective is to create a pan-European leader, spearheading the substitution of bulk transport and storage by big bags in Africa.
9/23/21	Keyes Packaging Group, Inc. (Arbor Investments)	Tekni-Plex, Inc. (Genstar Capital, LLC)	-	-	<ul style="list-style-type: none"> Tekni-Plex has acquired Keyes Packaging, a Washington-based manufacturer of protective packaging products for the food and beverage industry. Bolsters Tekni-Plex's overall efforts towards providing additional sustainable solutions to customers.
9/22/21	Plastisax S.L.	ALPLA Werke Alwin Lehner GmbH & Co KG	-	-	<ul style="list-style-type: none"> ALPLA has acquired Plastisax, a Spain-based manufacturer of plastic bottles for the cosmetics and home and personal care segments. Consolidates ALPLA's market position in eastern Spain and expands its production capacities for packaging solutions made from plastic HDPE.
9/22/21	Finproject S.p.A (remaining 60% stake)	Versalis SpA	-	-	<ul style="list-style-type: none"> Versalis has agreed to acquire the remaining 60% stake in Finproject, an Italy-based manufacturer of custom foam injection molding products. Versalis acquired a 40% stake in the company in July 2020 from VEI Capital. Aligns with Versalis' strategy to become the Italian leader in the high performance formulated polymers sector.
9/21/21	Ample Industries, Inc.	Resource Label Group, LLC (Ares Management Corporation)	-	-	<ul style="list-style-type: none"> Resource Label has acquired Ample Industries, a Missouri-based digital and flexographic printer for customers in the food, health, personal care, industrial, pharmaceutical and beverage segments. With the addition of Ample Labels, Resource Label will have 20 manufacturing locations in North America and an expanded footprint in the Midwest with four locations to serve customers.
9/20/21	Polymer Components business from EnPro Industries, Inc.	Edgewater Capital Partners	-	-	<ul style="list-style-type: none"> Edgewater Capital has acquired the polymer components business of EnPro Industries, a North Carolina-based industrial technology company. The organization has been renamed Altamira Material Solutions and is comprised of two production sites in Texas and one in Pennsylvania.
9/20/21	Gateway Plastics, Inc.	Silgan Holdings Inc.	\$485M	-	<ul style="list-style-type: none"> Silgan has acquired Gateway Plastics, a Wisconsin-based manufacturer and seller of dispensing closures and integrated dispensing packaging solutions. Expands Silgan's dispensing and specialty closures franchise.
9/17/21	Crawford Industries LLC	Spartech LLC (The Jordan Company, L.P. and Nautic Partners, LLC)	-	-	<ul style="list-style-type: none"> Spartech has acquired Crawford Industries, an Indiana-based producer of graphic-quality polyethylene and polypropylene sheet and an industry leader in printing and converting. Strengthens Spartech's ability to develop and deliver standard and custom plastic sheet and packaging products to customers.
9/17/21	A&A Global Imports, LLC	Boyne Capital Partners, LLC	-	-	<ul style="list-style-type: none"> Boyne Capital has acquired A&A Global Imports, a California-based supplier of packaging materials and ancillary products to the medical and recreational cannabis industry. Represents a recent platform investment in BCM Fund II.
9/16/21	Alpha Consolidated Holdings, Inc. (Irving Place Capital)	Pretium Packaging, LLC (Clearlake Capital Group, L.P.)	-	-	<ul style="list-style-type: none"> Pretium Packaging has agreed to acquire Alpha Packaging, a Missouri-based provider of sustainable packaging solutions to customers in the health and wellness, specialty food and beverage, home and personal care and other sectors. Combined platform will be able to better serve customers through enhanced solutions and production capabilities.
9/14/21	Matrix Films LLC	Eastman Chemical Company	-	-	<ul style="list-style-type: none"> Eastman has agreed to acquire Matrix Films, a Massachusetts-based marketer of PremiumShield-brand performance films, including its line of automotive film patterns. Expands Eastman's paint protection film pattern development capabilities, pattern database and installation training expertise.
9/14/21	Mold-Rite Plastics, LLC (Irving Place Capital)	Clearlake Capital Group, L.P.	-	-	<ul style="list-style-type: none"> Clearlake Capital has agreed to acquire Mold-Rite, a New York-based provider of value-added packaging components, such as jars and dispensing closures to a variety of end markets. Clearlake Capital seeks to build on long term consumer trends and preferences for providers focused on sustainability and innovation.

THIRD QUARTER 2021 PLASTIC CONVERTER TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
9/13/21	Cormack Packaging Pty Limited	TricorBraun, Inc. (Ares Management, Ontario Teachers' and AEA Investors LP)	-	-	<ul style="list-style-type: none"> TricorBraun has agreed to acquire Cormack Packaging, an Australia-based manufacturer of plastic packaging products for the food and beverage, pharmaceutical, personal care, industrial and household cleaning industries. Marks TricorBraun's entry into Australia and third acquisition this year.
9/13/21	ABC Technologies Holdings Inc. (26.4% stake from ABC Group Canada LP - Cerberus Capital Management, L.P.)	Funds affiliated with Oaktree Capital Management, L.P.	\$99M	7.5x	<ul style="list-style-type: none"> Funds affiliated with Oaktree Capital have agreed to acquire a 26.4% stake in ABC Technologies, a Canada-based manufacturer and supplier of plastics and light weighting products for the automotive industry. Oaktree Capital will look to support the company as a consolidator in the automotive technical plastic space.
9/10/21	Consumer Packaging Group, Inc.	PPC Flexible Packaging LLC (Morgan Stanley Private Equity)	-	-	<ul style="list-style-type: none"> PPC has acquired Consumer Packaging Group (CPG), a Wisconsin-based leader in flexographic printing and converting of flexible films, bags and pouches. Represents PPC's eighth acquisition of specialty and differentiated flexible packaging firms in the past four and a half years.
9/10/21	Polyethylene Films Production Line of Brikston Construction Solutions S.A.	TeraPlast Group	-	-	<ul style="list-style-type: none"> TeraPlast has acquired the polyethylene films production line of Brikston Construction Solutions. Adds 1,200 tonnes per year to the current production capacity for industrial polyethylene packaging and 300 tonnes per year for films recycling.
9/9/21	ETIFLEX	Optimum Group (IK)	-	-	<ul style="list-style-type: none"> Optimum Group has acquired ETIFLEX, a Denmark-based specialist in the production of self-adhesive labels. With the addition of ETIFLEX, the Optimum Group now consists of 16 member companies located in the Netherlands, Belgium, Germany and Denmark. Expands Optimum Group's footprint in Denmark and strengthens its position in Northern Europe in the field of flexible packaging solutions.
9/8/21	Fabri-Kal Corporation	Pactiv Evergreen Group Holdings Inc. (Pactiv Evergreen Inc.)	\$380M	7.0x	<ul style="list-style-type: none"> Pactiv Evergreen has agreed to acquire Fabri-Kal, a Michigan-based manufacturer of foodservice and custom thermoformed plastic packaging solutions. Expands Pactiv Evergreen's position in the foodservice segment, broadens its sustainable packaging offerings and improves manufacturing and distribution capabilities.
9/8/21	Flint Group's XSYS division (Koch Industries, West Street Capital Partners)	Lone Star Funds	-	-	<ul style="list-style-type: none"> Lone Star Funds has agreed to acquire Flint Group's XSYS division, which specializes in the development and supply of printing plates, sleeves and adapters and pre-press equipment to the packaging industry. Divestiture allows Flint Group to focus and invest further in its packaging inks and digital printing business, in addition to strengthening its balance sheet.
9/3/21	Dipec Plastics Holdings Ltd	MS-Group Limited (aka Morgans Consult)	-	-	<ul style="list-style-type: none"> Morgans Consult has acquired Dipec Plastics, a United Kingdom-based manufacturer of acrylic and other plastic screens. Helps Morgans Consult improve its product offering and further establish position in the market.
9/2/21	Toray Plastics (America)'s Old Baptist Road Film Plant in Rhode Island	ARLIN Mfg. Co., Inc.	-	-	<ul style="list-style-type: none"> ARLIN has agreed to acquire Toray Plastics (America)'s Old Baptist Road film plant in Rhode Island. Complements ARLIN's Trico Specialty Films division.
9/2/21	Coruñesa de Etiquetas	Asteria Group	-	-	<ul style="list-style-type: none"> Asteria has acquired Coruñesa de Etiquetas, a Spain-based printer and manufacturer of adhesive labels. Part of Asteria's plan to double its sales in two years.
8/30/21	Oneida Molded Plastics, LLC (Argosy Private Equity)	Cedar Ridge Holding Company	-	-	<ul style="list-style-type: none"> Cedar Ridge has acquired Oneida Molded Plastics, a New York-based manufacturer of precision injection molded components for the outdoor recreation and general industrial segments. Cedar Ridge seeks to grow the business through internal investments and opportunistic add-on acquisitions.
8/27/21	Kutterer Mauer AG (majority stake)	capiton AG	-	-	<ul style="list-style-type: none"> capiton has acquired a majority stake in Kutterer Mauer, a Germany-based manufacturer of plastic closures. Kutterer Mauer was formed in July 2008 through the merger of the family-owned companies Kutterer Kunststofftechnik GmbH and Mauer AG. Today, the company operates six manufacturing plants in Germany, Austria, Poland and the U.S.

THIRD QUARTER 2021 PLASTIC CONVERTER TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
8/24/21	Fruth Custom Packaging, Inc. and Cleanroom Film and Bag, Inc.	C-P Flexible Packaging (First Atlantic Capital)	-	-	<ul style="list-style-type: none"> C-P has acquired Fruth Custom Packaging and Cleanroom Film and Bag, both companies are based in California and specialize in manufacturing flexible rollstock and pre-made pouches used in classroom environments. Provides C-P with expanded geographic reach on the West Coast and expertise in medical device, biopharma, electronics and semiconductor packaging.
8/24/21	Five Points Films, LLC	Revolution (Arsenal Capital Partners)	-	-	<ul style="list-style-type: none"> Revolution has acquired Five Points Films, a Tennessee-based manufacturer of cast hand and machine stretch film for commercial customers. Expands Revolution's national footprint and broadens its sustainable-loop manufacturing capabilities.
8/20/21	WOLF PLASTICS Verpackungen GmbH	ALPLA Werke Alwin Lehner GmbH & Co KG	-	-	<ul style="list-style-type: none"> ALPLA has agreed to acquire WOLF PLASTICS, an Austria-based manufacturer of plastic buckets, canisters and bottles. Helps ALPLA expand its product portfolio and drive future growth in Central and South-Eastern Europe.
8/16/21	Elif Holding A.S.	Huhtamäki Oyj	\$486M	-	<ul style="list-style-type: none"> Huhtamäki has agreed to acquire Elif, a Turkey-based supplier of sustainable flexographic packaging. Reinforces Huhtamäki's position as a leading flexographic packaging company in emerging markets and strengthens business in attractive consumer product categories.
8/12/21	Tek Labels and Printing, Inc.	Resource Label Group, LLC (Ares Management Corporation)	-	-	<ul style="list-style-type: none"> Resource Label Group has acquired Tek Labels, a California-based company providing a full range of digital and flexographic printing capabilities and art finishing technology. Represents Resource Label Group's 20th acquisition and expands its regional strength in the western U.S. with seven locations to serve customers.
8/10/21	M-Industries, LLC	Tekni-Plex, Inc. (Genstar Capital, LLC)	-	-	<ul style="list-style-type: none"> Tekni-Plex has acquired M-Industries, a Michigan-based leader in container vented lining technology. M-Industries will operate as part of Tri-Seal, the Tekni-Plex division business specializing in closure liners and seals. Allows Tekni-Plex to increase the scope of solutions provided to clients, including venting expertise and technical packaging, which has applications in e-commerce/home delivery channels.
8/9/21	Dorum Color Company's Dry Color business	Teknor Apex Company, Inc.	-	-	<ul style="list-style-type: none"> Teknor Apex has acquired Dorum Color's dry color business. Dorum Color is an Ohio-based leading supplier of dry color in North America with a focus on the rotational molding market. The business will be added to the Teknor Color portfolio.
8/5/21	Chemres (Charter Oak Equity, LP)	Benvic Group (Investindustrial)	-	-	<ul style="list-style-type: none"> Benvic has acquired Chemres, a New Jersey-based provider of polymers, custom compounds and solutions for a variety of industries including medical, packaging, wire and cable. Chemres is the ninth 'add-on' acquisition since Benvic joined Investindustrial's portfolio in 2018. Allows Benvic to enter the U.S. market and strengthen its exposure to the medical sector.
8/4/21	Sports Molding Inc. (Sage Park, Inc.)	Plastic Components, Inc. (MPE Partners)	-	-	<ul style="list-style-type: none"> Plastics Components (PCI) has acquired Sports Molding (SMI), a Utah-based injection molder offering a full suite of design, manufacturing and value-added services to a diverse range of sectors. MPE and PCI partnered in the transaction with several members of the SMI management team.
8/3/21	Precision Concepts Costa Rica	IntraPac International Corporation (Berenson Capital Partners, ONCAP)	-	-	<ul style="list-style-type: none"> IntraPac has acquired Precision Concepts Costa Rica, a Costa Rica-based vertically integrated molder and assembler of medical devices. Provides IntraPac a wider set of products, processes, capabilities and facilities to offer customers.
8/3/21	Dimex LLC (Grey Mountain Partners, LLC)	Westlake Chemical Corporation	-	-	<ul style="list-style-type: none"> Westlake has agreed to acquire Dimex, an Ohio-based producer of consumer products made from post-industrial-recycled polyvinyl chloride, polyethylene and thermoplastic materials. Aligns with Westlake's strategy and commitment to contribute towards a sustainable, circular economy.
8/3/21	Prestige-Pak, Inc.	C-P Flexible Packaging, Inc. (First Atlantic Capital)	-	-	<ul style="list-style-type: none"> C-P has acquired Prestige-Pak, Inc., a Wisconsin-based manufacturer focused on printed packaging films for the retail food markets. Provides C-P diverse capabilities including 10-color flexographic printing, laminating, custom slitting and a variety of prepress services.

THIRD QUARTER 2021 PLASTIC CONVERTER TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
8/2/21	Certain Assets of Trilogy Plastics Inc	Myers Industries, Inc.	-	-	<ul style="list-style-type: none"> Myers Industries has acquired certain assets of Trilogy Plastics, an Ohio-based custom rotational molder specializing in high quality, high tolerance parts and assemblies. Marks the second rotomolding acquisition for Myers in the last nine months. Accelerates Myers long-term strategy and provides customers access to a more complete portfolio of diverse products.
8/2/21	Spectex, LLC	Sur-Seal, LLC (Heartwood Partners)	-	-	<ul style="list-style-type: none"> Sur-Seal has acquired Spectex, a New Hampshire-based company specializing in custom engineering, converting and manufacturing of flexible materials primarily for the medical, aerospace and industrial industries. Creates a stronger combined business that will benefit customers through the expansion of manufacturing and distribution locations, enhanced engineering and material development capabilities and an ability to serve more industries.
8/2/21	Czech Operation of Technical Rubber Products of Trelleborg AB (publ)	Kaprain Group	-	-	<ul style="list-style-type: none"> Kaprain Group has agreed to acquire Trelleborg's Czech operation of technical rubber products. The operation develops and manufactures a broad range of engineered polymer products, such as V-belts, specialty molded components and inflatable rubber dams.
7/30/21	Able Manufacturing & Assembly	National Composites (Covington Capital)	-	-	<ul style="list-style-type: none"> National Composites has acquired Able Manufacturing & Assembly, based in Missouri. Marks the company's fifth acquisition in two years. Doubles National Composites' production space and adds additional portfolio capabilities, including large composite molding capabilities exceeding 40+ feet.
7/29/21	Pawling Engineered Products	Quadion LLC (dba Minnesota Rubber and Plastics - KKR)	-	-	<ul style="list-style-type: none"> Quadion has acquired Pawling, a New York-based custom elastomeric inflatable seal and extruded solutions provider. Complements Quadion LLC's existing offerings, which include highly engineered elastomer and thermoplastic solutions for medical device, water, food and beverage, transportation and other essential industries.
7/28/21	Novomer Inc.	Danimer Scientific, Inc.	\$152M	-	<ul style="list-style-type: none"> Danimer has agreed to acquire Novomer, a New York-based manufacturer of PHS-based resins and other biodegradable materials from plant-based and renewable feedstocks. Danimer believes that Novomer's p(3HP) is highly complementary with Danimer's inputs, and can be incorporated as a component in certain Danimer resins.
7/28/21	Weihai Hengyu Medical Products Co., Ltd. (80% stake)	AptarGroup, Inc.	-	-	<ul style="list-style-type: none"> Aptar agreed to acquire an 80% stake in Weihai Hengyu, a China-based manufacturer of elastomeric and plastic components used in injectable drug delivery. Strengthens Aptar's competitive position in Asia and in the high-growth injectable drug delivery market.
7/28/21	Vestcom, Inc. (Charlesbank Capital Partners, LLC)	Avery Dennison Corporation	\$1.5B	-	<ul style="list-style-type: none"> Avery Dennison has acquired Vestcom, an Arkansas-based provider of pricing and branded labeling solutions. Expands Avery Dennison's position in high-value categories and adds complementary channel access and data management capabilities.
7/27/21	Euroflex	ProAmpac (Pritzker Private Capital)	-	-	<ul style="list-style-type: none"> ProAmpac has acquired Euroflex, an Ireland-based producer of flexible printed film, lamination and pouching packaging solutions. Represents an important strategic opportunity for ProAmpac in Ireland and Europe.
7/26/21	The Flexan Corporation (Linden LLC)	ILC Dover (New Mountain Capital L.L.C)	-	-	<ul style="list-style-type: none"> ILC Dover has agreed to acquire Flexan, an Illinois-based manufacturer of high-precision silicone and rubber parts for the medical device industry. Marks the second acquisition ILC Dover has completed since announcing a partnership with New Mountain Capital in 2020. Grows ILC Dover's life sciences solutions, including for the pharmaceutical and biopharmaceutical end markets.
7/23/21	InterFlex Group, Inc. (Nicolet Capital Partners, LLC)	Toppan Forms Co., Ltd.	-	-	<ul style="list-style-type: none"> Toppan has acquired InterFlex, a North Carolina-based manufacturer and supplier of packaging solutions for specialty packaged goods segments in the U.S. and Europe. Enables Toppan to establish a flexible packaging production network in the North American and European markets and drive growth of sustainable packaging products.
7/22/21	Chromatic Productions, Inc.	Signature Action Packaging Inc. (H.I.G. Capital, LLC)	-	-	<ul style="list-style-type: none"> Signature Action Packaging has acquired Chromatic Productions, a California-based provider of flexible packaging, shrink sleeves and labels to short-run, high-SKU count customers in the beverage, nutraceutical, cosmetic and food end markets. Provides SAP regional scale on the West Coast.
7/20/21	Panara a.s. (minority stake)	ALPLA Werke Alwin Lehner GmbH & Co KG	-	-	<ul style="list-style-type: none"> ALPLA has acquired a minority stake in Panara, a Slovakia-based company focused on the development of fully bio-based and biodegradable plastics. Helps ALPLA improve its activities in the research field of alternative, sustainable raw materials for packaging.

THIRD QUARTER 2021 PLASTIC CONVERTER TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
7/19/21	MCP Performance Plastic	Faerch Group (A.P. Moller Holding)	-	-	<ul style="list-style-type: none"> Faerch has agreed to acquire MCP, an Israel-based manufacturer of turn-key packaging solutions, serving food producers, brand owners and retailers in the U.S., Middle East and Europe. MCP has two production sites in the U.S. and Israel offering a large range of food trays made from CPET, APET and PP. Marks Faerch's first acquisition under its new ownership by A.P. Moller. Expands Faerch's footprint beyond Europe and establishes a presence in the U.S. market.
7/14/21	Neptun Plast A/S and Atlantic Floats Denmark A/S	SP Group A/S	\$6M	-	<ul style="list-style-type: none"> SP Group has agreed to acquire Neptun Plast and Atlantic Floats, two Denmark-based companies. Neptun Plast is an advanced injection molding company and Atlantic Floats develops and sells trawl floats. Adds a broader range of products to SP Group's portfolio.
7/8/21	Resource Label Group, LLC (First Atlantic Capital, Ltd. and TPG Growth, LLC)	Ares Management Corporation	-	-	<ul style="list-style-type: none"> Ares Management has acquired Resource Label Group, a Tennessee-based full service provider of pressure sensitive label, shrink sleeve and RFID/NFC technology for the packaging industry. Resource Label recently completed its 19th acquisition in May 2021 and looks to continue growing with the help of Ares Management.
7/7/21	Ferguson Production, Inc.	Revere Plastics Systems, LLC (Aradian)	-	-	<ul style="list-style-type: none"> Revere has acquired Ferguson, a Kansas-based manufacturer of custom plastic injection molding products. Marks Revere's fourth acquisition and fifth new facility over the last two and a half years. The acquisition comes six months after Revere's acquisition of its first manufacturing facility in Mexico and increases Revere's manufacturing footprint from eight to nine locations throughout North America.
7/7/21	Assets of Westech Building Products (Westlake Chemical Corporation)	Trusscore Inc.	-	-	<ul style="list-style-type: none"> Trusscore has acquired the assets of Westech Building Products, a Canada-based developer of high-performing vinyl building materials. Improves Trusscore's reputation as a premier material science company and positions it for growth across the residential, commercial and agriculture markets.
7/2/21	Carolina Precision Plastics LLC (dba CPP Global)	Westfall Technik, Inc. (Lee Equity Partners, LLC and Blackburn Partners LLC)	-	-	<ul style="list-style-type: none"> Westfall has acquired Carolina Precision Plastics (CCP), a North Carolina-based plastic injection molder in the beauty care, cosmetics, beverage and consumer goods markets. CCP's three plants cover approximately 335,000 square feet of manufacturing space and run about 100 injection molding machines. Strengthens Westfall's geographic footprint by adding its first plants in the southeastern United States, as well as in China.
7/2/21	Fibertech Inc.	South Central Inc.	-	-	<ul style="list-style-type: none"> South Central has agreed to acquire Fibertech, an Indiana-based manufacturer of custom-engineered, rotational-molded plastic products including bulk containers, plastic pellets, plastic lockers and more for a variety of industries. Expands and diversifies South Central's portfolio of investments across multiple industries.
7/2/21	Multi-Color Corporation (Platinum Equity) and Fort Dearborn Company (Advent International Corporation)	Clayton, Dubilier & Rice, LLC	\$6.0B	-	<ul style="list-style-type: none"> Clayton, Dubilier & Rice (CD&R) has agreed to acquire Multi-Color and Fort Dearborn, two label manufacturers based in Ohio and Illinois, respectively. CD&R will merge the two companies in a deal that values the combined company at approximately \$6 billion including debt.
7/1/21	Vi-Lux Building Products Inc.	CertainTeed Corporation (Compagnie de Saint-Gobain S.A.)	-	-	<ul style="list-style-type: none"> CertainTeed has acquired Vi-Lux Building Products, a Canada-based custom manufacturer of cellular polyvinyl chloride molding and trim. Allows CertainTeed to expand its offering of standard and specialty trim and millwork products.
7/1/21	Ultimate Packaging	ProAmpac (Pritzker Private Capital)	-	-	<ul style="list-style-type: none"> ProAmpac has acquired Ultimate Packaging, a United Kingdom-based pioneer in flexographic and digitally-printed flexible packaging. Strengthens ProAmpac's position in flexible food packaging, broadens its portfolio of sustainable solutions and extends its reach across the United Kingdom.
6/29/21	Termoplast S.r.L.	Schur Flexibles Holding GmbH (Lindsay Goldberg)	-	-	<ul style="list-style-type: none"> Schur Flexibles has acquired Termoplast, an Italy-based leader in the production of sustainable and fully recyclable films. Accelerates Schur Flexibles' expansion in the Italian market.

THIRD QUARTER 2021 DISTRIBUTION TRANSACTIONS

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
9/29/21	Aquatech Specialty (Shanghai) International Trading Co., Ltd. and Aquatech Specialty (Guangzhou) Trading Co., Ltd.	IMCD N.V.	-	-	<ul style="list-style-type: none"> IMCD has agreed to acquire Aquatech, a China-based company specialized in waterborne solutions for the coatings, inks and textile industries. Enables IMCD to become a stronger partner for customers and suppliers for sustainable coatings solutions in the region.
9/27/21	Rit-Chem Co., Inc.	Safic-Alcan	-	-	<ul style="list-style-type: none"> Safic-Alcan has acquired Rit-Chem, a New York-based boutique chemical distributor, focused primarily on the performance and life science sectors. Rit-Chem will become part of the Chemspec organization in the U.S., the American affiliate of Safic-Alcan.
9/6/21	Lambert Products	Ardeca Lubricants	-	-	<ul style="list-style-type: none"> Ardeca has acquired Lambert Products, a France-based distributor of industrial lubricants. Enables Ardeca to diversify its activities by accelerating development in the industrial lubricants sector in anticipation of the changes to come from electric vehicles.
9/2/21	Ingredients Solutions, Inc.	Tilley Chemical Company, Inc. (SK Capital Partners)	-	-	<ul style="list-style-type: none"> Tilley has acquired Ingredients Solutions, Inc., a Maine-based distributor and blender of specialty hydrocolloids. Marks Tilley's first acquisition since SK partnership. Enhances Tilley's portfolio of value-add specialty chemicals and ingredients with a full line of hydrocolloid products for food and beverage, animal nutrition, personal care and pharmaceutical markets.
9/2/21	Supavia	ADDEV Materials (Tikehau Capital, Bpifrance)	-	-	<ul style="list-style-type: none"> ADDEV Materials has acquired Supavia, a France-based company specializing in the distribution of adhesives, greases, oils, sealants and paints for the maintenance and manufacture of civil and military airplanes and helicopters. Strengthens ADDEV Material's offering in the military aeronautics market.
8/24/21	Casoria Company Limited	OQEMA AG	-	-	<ul style="list-style-type: none"> OQEMA has acquired Casoria, an Ireland-based distributor of chemicals and metals. Expands OQEMA's presence in Ireland and provides a platform for the company's broad product range.
8/17/21	Painters Supply & Equipment (PNC RiverArch Capital and Skyline Global Partners LLC)	Odyssey Investment Partners	-	-	<ul style="list-style-type: none"> Odyssey Investment Partners has acquired Painters Supply & Equipment (PSE), a Michigan-based leading specialty distributor of paint, coatings and related consumables serving the automotive refinish, commercial and diversified industrial markets. Odyssey Investment Partners will help PSE build out its national platform.
8/13/21	Ingredients Plus (Hong Kong) Limited (Ingredients Plus Pty. Limited)	Azelis (EQT Partners)	-	-	<ul style="list-style-type: none"> Azelis has agreed to acquire Ingredients Plus (Hong Kong), a supplier of personal care ingredients with more than 40 employees. Enhances Azelis' lateral value chain and solidifies its reputation as a leader in the Chinese personal care industry.
8/9/21	Specialty Chemical Sales and JF Shelton (Lorama Group Inc.)	Ravago Holdings America, Inc. (Ravago S.A.)	-	-	<ul style="list-style-type: none"> Ravago Holdings America has acquired Specialty Chemical Sales and JF Shelton, two leading distributors in the paint, coatings, adhesives and polymer markets in North America. The companies are based in Ohio and Washington, respectively. Complements Ravago Holdings America's specialty chemical distribution business and strengthens the company's North American footprint.
8/5/21	Juvasa Group	Berlin Packaging (Oak Hill Capital Partners)	-	-	<ul style="list-style-type: none"> Berlin Packaging has acquired Juvasa Group, a group of companies focused on the supply of glass, plastic and metal packaging for the food and beverage industry. Juvasa Group is based in Spain. Broadens Berlin Packaging's footprint in Iberia and the Canary Islands and adds new design and e-commerce capabilities.
8/4/21	Centerchem, Inc.	LBB Specialties (LeBaronBrown Industries)	-	-	<ul style="list-style-type: none"> LBB has acquired Centerchem, a Connecticut-based specialty chemical and ingredients distributor primarily to the personal care and food and nutrition end markets. Centerchem's provides complementary offerings to LBB's existing portfolio.
8/2/21	Matrix Chemical, LLC	Brenntag SE	-	-	<ul style="list-style-type: none"> Brenntag has acquired Matrix Chemical, a Texas-based solvents distributor and the largest distributor of acetone in North America with sales of approximately \$200 million year to date in 2021. Enables Brenntag to leverage Matrix's supplier relationships, logistics network and bulk storage capacity in combination with Brenntag's existing North American infrastructure and inbound logistics.

THIRD QUARTER 2021 DISTRIBUTION TRANSACTIONS *(Continued)*

Announced Date	Target	Acquirer	Value	EBITDA Mult.	Details
8/2/21	Western Paper Distributors, Inc.	Imperial Dade (Bain Capital Private Equity, LP)	-	-	<ul style="list-style-type: none"> Imperial Dade has acquired Western Paper, a Colorado-based distributor of foodservice packaging and janitorial supplies. Western Paper's Colorado, Arizona and New Mexico locations significantly enhance Imperial Dade's presence in the West.
7/29/21	Western Reserve Chemical	Harwick Standard Distribution	-	-	<ul style="list-style-type: none"> Harwick has acquired Western Reserve, an Ohio-based distributor of specialty chemicals and industrial intermediates to compounders and formulators. Complements Harwick's brand and distribution capabilities.
7/26/21	Wellstar Group (remaining 49% stake)	Brenntag SE	-	-	<ul style="list-style-type: none"> Brenntag has acquired the remaining 49% stake in Wellstar Group, a Hong Kong-based distributor of pigments and coatings. Brenntag acquired a 51% majority stake in August 2017.
7/20/21	Quimdis	Azelis (EQT Partners)	-	-	<ul style="list-style-type: none"> Azelis has agreed to acquire Quimdis, a France-based distributor of ingredients for nutraceuticals, flavors and fragrances, animal nutrition, personal care, pharma and food. Enhances the position of Azelis France in the life sciences sector.
7/20/21	Alexis Oil Company and Global Industrial Solutions	RelaDyne, Inc. (Audax Management Company, LLC)	-	-	<ul style="list-style-type: none"> RelaDyne has acquired Alexis Oil and Global Industrial Solutions, collectively Alexis/GIS, a California-based lubricant and commercial fuels distributor. Extends RelaDyne's footprint into southern California and expands its presence in Arizona.
7/19/21	Bech Chem	Akrochem Corporation	-	-	<ul style="list-style-type: none"> Akrochem has acquired Bech Chem, a Texas-based chemical supplier. Allows Akrochem to expand into the paint, coatings and lubricants market.
7/16/21	Materias Químicas de México S.A. de C.V.	IMCD N.V.	-	-	<ul style="list-style-type: none"> IMCD has agreed to acquire Materias Químicas de México S.A. de C.V. (Maquimex), a Mexico-based chemicals distributor providing commercial and technical expertise in the preservatives, HI&I, energy, water treatment and other industrial markets. Maquimex's industrial and life sciences businesses complement IMCD México's existing presence in the pharmaceuticals, food, nutrition, beauty, personal care and HI&I markets.
7/14/21	Coseal	Azelis (EQT Partners)	-	-	<ul style="list-style-type: none"> Azelis has agreed to acquire Coseal, a South Korea-based company known for its specialist distribution, repackaging and blending of agricultural and horticultural surfactants. Drives Azelis' growth in these market segments across Asia Pacific.
7/1/21	MH	Azelis (EQT Partners)	-	-	<ul style="list-style-type: none"> Azelis has acquired MH, a South Korea-based distributor in the food ingredients market. Complements Azelis' already strong presence in the personal care market with MH's foothold in new market segments.
7/1/21	Thermosleeve USA	US Distribution LLC (TRS Capital)	-	-	<ul style="list-style-type: none"> US Distribution has acquired Thermosleeve, a California-based supplier of heat shrinkable products in the United States. Thermosleeve founder David Levy will continue to be active in the company, overseeing the transition and helping with future growth.

Source: Target/acquirer press releases

PNC'S CHEMICALS & PLASTICS EXPERIENCE

Lending Experience

<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>Entegris</p> <p>\$400,000,000 \$400,000,000</p> <p>Revolving Credit Facility Term Loan B</p> <p>JLA & Bookrunner</p>	<p>March 2021</p> <p>MYERS INDUSTRIES, INC.</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>March 2020</p> <p>NewMarket</p> <p>\$900,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</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>January 2020</p> <p>Ashland</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>CF 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>	<p>August 2019</p> <p>PPG Industries</p> <p>\$2,200,000,000</p> <p>Revolving Credit Facility</p> <p>JLA & Syndication Agent</p>	<p>June 2019</p> <p>VENATOR</p> <p>\$375,000,000</p> <p>Delayed Draw Term Loan</p> <p>Syndication Agent</p>	<p>June 2019</p> <p>AVIENT</p> <p>\$450,000,000</p> <p>Revolving Credit Facility</p> <p>Documentation Agent</p>	<p>June 2019</p> <p>AXALTA</p> <p>\$400,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>
<p>June 2019</p> <p>Thredgar</p> <p>\$500,000,000</p> <p>Revolving Credit Facility</p> <p>JLA & Syndication Agent</p>	<p>May 2019</p> <p>KOPPERS</p> <p>\$600,000,000 \$87,500,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>JLA & Admin. Agent</p>	<p>May 2019</p> <p>CABOT</p> <p>€300,000,000</p> <p>Revolving Credit Facility</p> <p>Co-Syndication Agent</p>	<p>April 2019</p> <p>Valvoline</p> <p>\$475,000,000 \$575,000,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>Co-Agent</p>	<p>March 2019</p> <p>Ingevity</p> <p>\$375,000,000</p> <p>Term Loan A-1</p> <p>Joint Lead Arranger</p>	<p>January 2019</p> <p>Cambrex</p> <p>\$600,000,000 \$200,000,000</p> <p>Revolving Credit Facility Term Loan A</p> <p>Documentation Agent</p>
<p>January 2019</p> <p>Celanese</p> <p>\$1,250,000,000</p> <p>Revolving Credit Facility</p> <p>Participant</p>	<p>July 2018</p> <p>Westlake Chemical</p> <p>\$1,000,000,000</p> <p>Revolving Credit Facility</p> <p>Documentation Agent</p>	<p>May 2018</p> <p>HUNTSMAN</p> <p>\$1,200,000,000</p> <p>Revolving Credit Facility</p> <p>Joint Books, JLA & Syndication Agent</p>	<p>April 2018</p> <p>FERRO</p> <p>\$500,000,000 \$820,000,000</p> <p>Revolving Credit Facility Term Loan B</p> <p>Admin Agent, JLA & Bookrunner</p>	<p>March 2018</p> <p>gcp</p> <p>\$350,000,000</p> <p>Revolving Credit Facility</p> <p>Joint Lead Arranger</p>	<p>February 2018</p> <p>ADVANSIX</p> <p>\$425,000,000</p> <p>Revolving Credit Facility</p> <p>Joint Lead Arranger</p>

Bonds Experience

<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</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>Valvoline</p> <p>\$535,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>	<p>December 2020</p> <p>RAYONIER</p> <p>\$500,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>	<p>November 2020</p> <p>AXALTA</p> <p>\$700,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>	<p>October 2020</p> <p>lyondellbasell</p> <p>\$3,900,000,000</p> <p>Senior Notes</p> <p>Senior Co-Manager</p>	<p>October 2020</p> <p>Ingevity</p> <p>\$550,000,000</p> <p>Senior Notes</p> <p>Co-Manager</p>

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