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Chemicals M&A Review

Contents

PETRONAS Chemicals Group is acquiring Perstorp a portfolio company of PAI Partners — Financial Advisor

H.I.G. Capital has sold Valtris Specialty Chemicals to SK Capital — Financial Advisor

arxada (formerly Lonza Specialty Ingredients) a portfolio company of BainCapital and Cinven has combined with TROY — Financial Advisor

heubach and SK Capital have acquired the Pigments business of Clariant — Financial Advisor

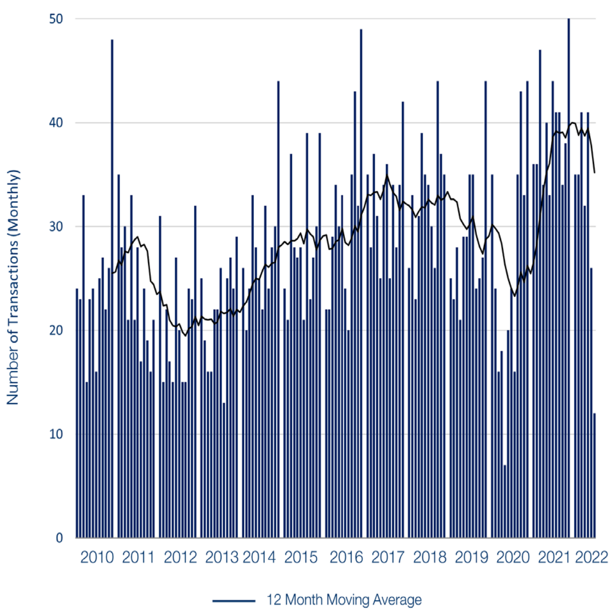
Highlights

- Chemicals M&A volumes starting to slip but transaction multiples remain at 10-year average levels with continued strong demand for higher tier specialty chemical companies
- Chemical companies still expected to generate strong profitability in 2022 despite signs of slowing demand towards the end of the year
- Trading multiples following the markets down but many high end segments still showing resilience with diversified chemical companies taking the largest impact
- Piper Sandler hosts its sixth annual Global Chemicals M&A Conference in New York on Tuesday November 1, 2022

Chemicals M&A

Certainly 2022 has not turned out as any of us would have expected. The almost relentless stream of negative impacts on the global economy has seen the chemical industry buffeted by numerous effects that would normally be, at a minimum detrimental and at worst, crushing. Global inflation, labor shortages, war in Ukraine, oil price increases, unprecedented gas pricing and potential shortages, supply chain issues, continued lockdowns in China and rising interest rates. These would normally be enough to derail any industry, and yet the chemical industry, despite all these challenges, is in surprisingly good shape. As we show later, profits have until recently, remained robust and many sectors continue to post both solid revenue and profits. There has been softening, but no collapse of demand and generally the industry has managed to pass on raw material price rises. Whether this strength continues, will be determined by the dynamics of each chemical sector, especially the specific demand outlook. Latest indications from company profits and guidance show resilience, with most businesses maintaining guidance for the remainder of the year. Although Europe and Asia are showing more weakness recently and a few companies have altered their profit outlook.

Figure 1: Monthly Chemicals M&A Volumes



Piper Sandler and Capiq analysis. Deals above $10m

Of course, with this backdrop, it is unsurprising we have seen a generally more cautious M&A environment in chemicals and more broadly. As Figure 1 shows, the number of announced deals has started to slow in the last few months albeit from the recent highs in 2021. There has been a particular slowdown from June/July but still at levels near the 10-year average for the industry. With the uncertainty hanging over the global economy, M&A for the rest of the year is expected to remain at more modest levels, as companies focus on "strategic" deals, "bolt-ons" and probably below an EV of $1bn in size. Indeed, in the last months:

- SK – Huntsman (Textile Chemicals)
- Solenis – Clearon
- J.M. Huber – Biolchim Group
- Ingevity – Ozark Materials

have all been announced and characterise the type of transaction expected as the market focuses more on strategic or synergistic acquisitions.

Chemicals M&A Review

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Based on the current demand for acquisitions across certain sectors and segments, M&A activity will likely moderate as chemical companies reshape their portfolios. Furthermore, as shown Figure 2 and 3, profits for most sectors have actually been maintained. Even in commodities and intermediates up to Q2 2022, companies have reported increasing profits on average. Clearly some of this is inflation based, but it shows the ability of the industry to maintain and even pass through raw material and energy price rises. The speciality segments (mid and high tier) have shown a more even profit progression over the last 10 years and this partially explains investor preference in these sectors and the increased M&A in these areas. Profits and margins across chemicals are expected to show differing outcomes depending the product/market segment.

Figure 2: Average Chemical Company Profits

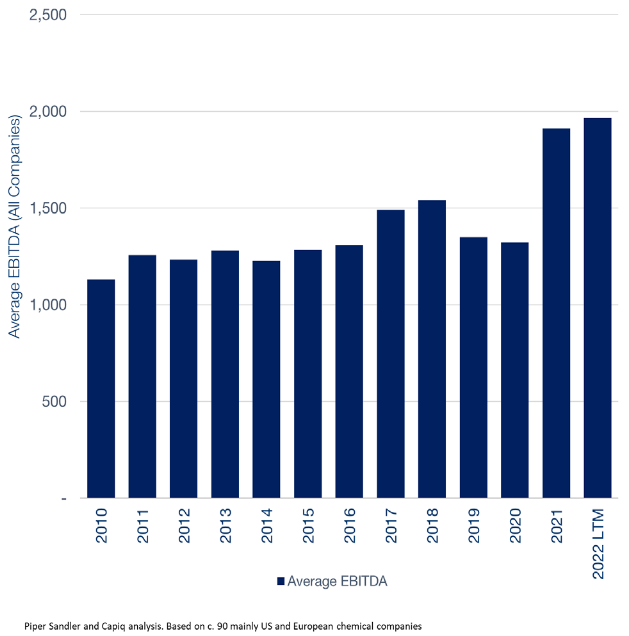
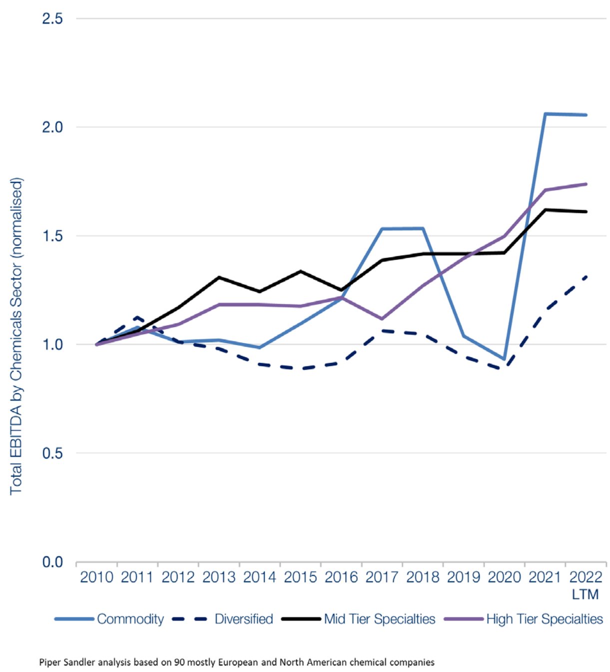
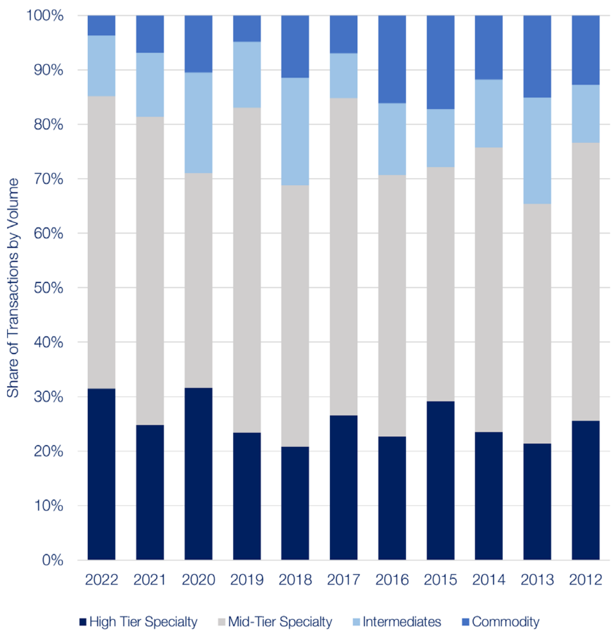


Figure 3: Average Chemical Company Profits by Sector



However, the realignment across market lines rather than product value chains, coupled with consolidation in the industry, has resulted in more discipline across many sectors. As shown in Figure 4, over the last 10 years the majority of M&A has been in the specialty segments with only 10-20% of transactions in commodities or intermediates. Consequently, the specialty segments are expected to be able to largely preserve profitability at current levels or even higher. Conversely, price pressure will be more intense for the more globally competitive commodities. Our expectations are that much of the strategic M&A across specialties will continue but with fewer large deals in the short term. Commodities and intermediates M&A could see more opportunistic transactions as companies with oil and gas in their portfolios make acquisitions across chemicals.

Figure 4: Chemicals Transaction Volumes by Sector

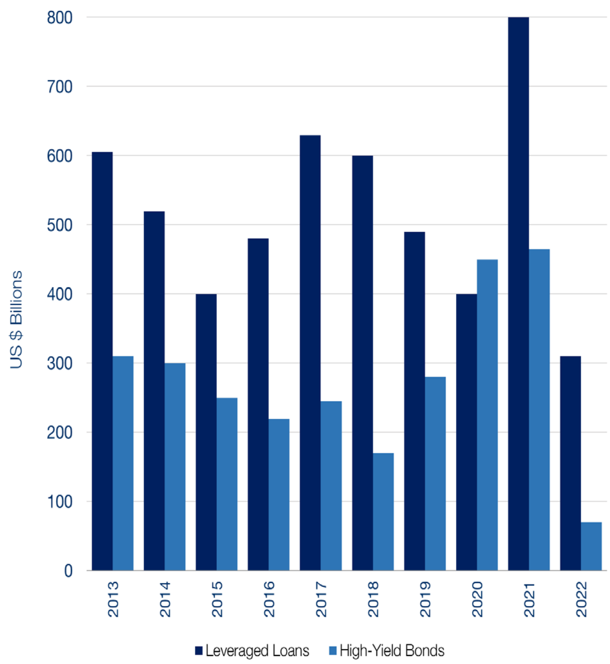


Piper Sandler analysis based on c. 1500 chemical transactions above c. $50m

Private Equity

The last few years have seen exceptionally strong activity by financial sponsors and this has also partially underpinned both transaction multiples and volumes, while also providing an exit for corporate carve-outs or secondary buy-outs. Naturally, with the cost of debt rising and limited availability, private equity will be unwilling and possibly unable to deploy capital as easily for the remainder of 2022. The overall leveraged loan market has already fallen and will likely be subdued for the rest of the year (Figure 5). In turn we would expect to see financial sponsors focusing on higher quality and less cyclical businesses where financing will be more favourable. For the more specialty (mid and high tier) chemical sectors or particularly attractive assets, private equity will remain active albeit possibly less aggressive on valuation. Of course, the vast reserve of "dry powder" will necessitate that financial sponsors return to the market more aggressively once interest rates plateau and debt pricing and availability become more predictable. The next few months will likely see a more subdued impact from financial sponsors on chemicals M&A, with a pick-up towards (or in) 2023. Any constraints such as weaker exit options or limited IPO possibilities will be important, but with capital to deploy, there is only so long before financial sponsors have to return to the acquisition trail.

Figure 5: Leveraged Loan & High Yield Bond Volumes

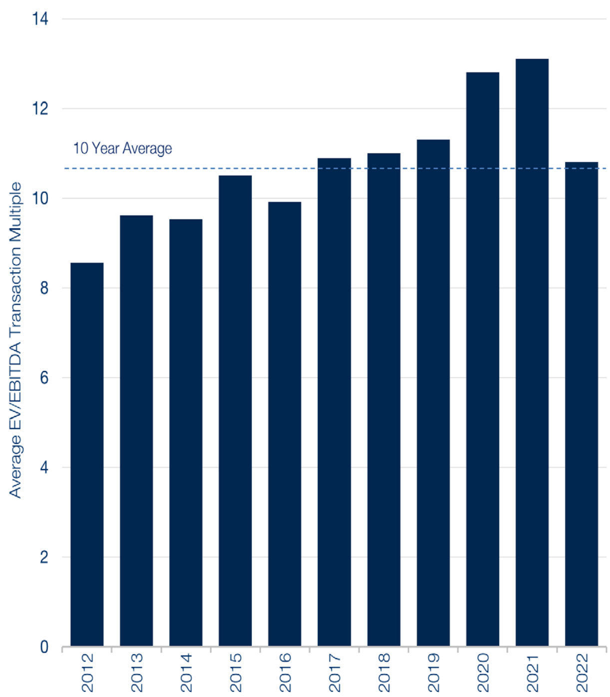


Source: AdvantageData, LCD

Transaction Multiples

Unsurprisingly in a less favourable debt and interest rate environment, the trading multiples of chemical companies in most stock markets have declined. Although this is an important benchmark, actual transaction multiples are much better indicators of the strength of valuation in the M&A market. A detailed analysis of transactions in chemicals over the last 10 years shows that multiples in 2020 and 2021 hit an all-time high reaching an EV of 12-13x EBITDA on average (Figure 6). This was somewhat flattered by the decline in EBITDA during part of this time period but undoubtedly last year was a particularly strong year for M&A globally. In the first 8 months of this year transaction multiples have declined to closer to 11x EBITDA, in line with the pre-Covid period 2017-2019 and also in line with the mid to longer term average. Naturally the economic and political environment has weighed heavily on potential growth, lack of debt and higher interest rates all feeding into lower valuations and consequently transaction multiples. The general expectation in an industry so heavily dependent on energy and oil-based raw materials would be for a far larger reduction in valuation. But the strength of the secto through consolidation, more focus on profits rather than volume and perhaps most importantly, the portfolio shifts in Europe and US to specialties, has limited the overall decline.

Figure 6: Chemical Company Transaction EBTDA Multiples

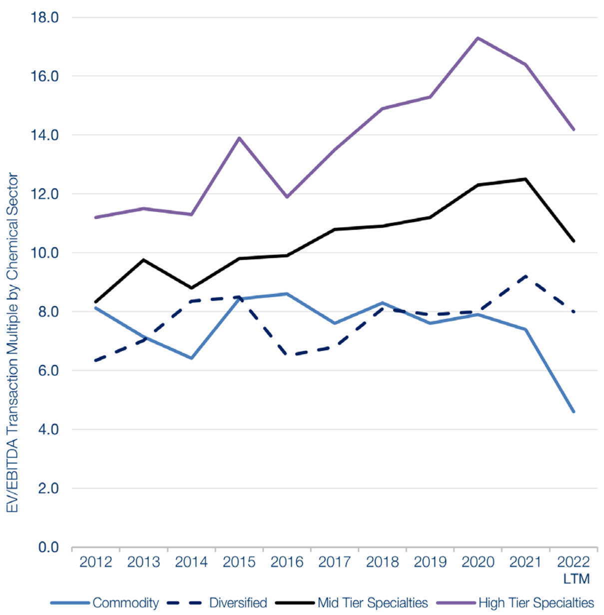


Piper Sandler internal analysis. Disclosed Transactions > c.$100m

A more detailed analysis of transaction multiples by type is shown in Figure 7. As would be expected, all sectors have declined. Across specialties the decline is by c. 2 x (EV/EBITDA) so that that mid-tier specialties now trade a 10.4x EV/EBITDA for 2022 (January – August). However, the steepest drop has been for commodities which have declined by almost 3 turns to c. 4.5x EV/EBITDA (this represents a 40% decrease compared to 15% for high tier specialties). The energy and raw material outlook for commodities is more closely tied to energy costs, hence the larger impact on valuation, especially in a lower demand environment. Despite a strong profit position currently across the vast majority of chemical sectors, valuations are being discounted primarily due to the uncertainty in the global economy and financial tightening. If most company forecasts for margins to be maintained for the remainder of 2022 proves accurate, it will be interesting to see if valuations start to edge upwards.

The evolution of end market demand and input cost effects will determine which sectors will keep the most robust valuations. On this basis it would be safe to assume specialties will again outperform commodities & intermediates, with companies in any of these latter sectors being particularly vulnerable to lower valuations in private and public markets.

Figure 7: Chemical Company Transaction EBITDA Multiples by Sector



Piper Sandler internal analysis. Disclosed Transactions > c.$100m

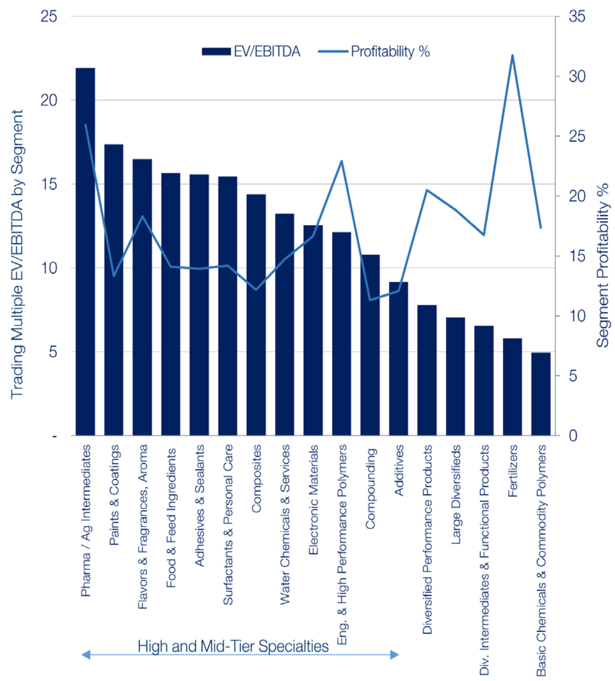
Clearly there is a downside risk to the overall economy. The 2022 Q4 economic situation will determine much of how 2023 develops. The war in Ukraine, Chinese property debt overhang and global inflation could weigh heavily to derail any pick-up activity next year. Our newsletter in Q1 2023 will provide an update on the impact and outlook for Chemicals M&A for next year, in what could prove to be a highly challenging year or the start of a rebound.

Sector Trading Multiples

As would be expected, trading multiples for chemical companies have also dropped. The decline has been larger than for transaction multiples, primarily because of the higher proportion of commodity and diversified companies in the index.

The overall decline is from c. 14x in 2021 to 11x EV/EBITDA (Jan-Aug 2022). More enlightening is the segment-specific trading multiples shown in Figure 8 where a selection of 15+ chemical product/market/company segments are plotted together with segment profitability. For the more specialty segments (marked on the chart) there is a limited, if any, correlation of profitability with multiple (we have previously shown the main correlation is with forecast profit growth).

Figure 8: Coatings Resins - Sector Fragmentation



Source: Piper Sandler analysis and Capiq

However, what is striking is that most multiples remain above 15x for this group, even in the current climate, showing the strength and investor confidence in the sector.

Equally striking is that diversified, broad-based chemical companies and more commodity businesses have average multiples in the c. 5-7x range, despite comparable profitability with the more focused and specialty companies. This represents an almost 50% discount and on the face of it would seem wholly unjustified. This is usually explained by a “diversified company discount” as well as investors’ preference for the mostly smaller and more focused businesses with a higher growth potential. Whether the stable earnings of larger diversified companies in the current environment should be viewed so unfavourably, seems to be penalising many companies unfairly. Of course, growth for these larger companies will mostly be lower by virtue of the overall scale of the businesses, but there is more than a perception in the market that analysts have an incomplete understanding of many larger companies. The result is often a sum-of-the-parts analysis that seems unrealistic or a focus on specific areas of the firm to the detriment of other parts of the portfolio. Large, diversified corporates will often generate slower growth. Whether they should be penalised so harshly is troublesome.

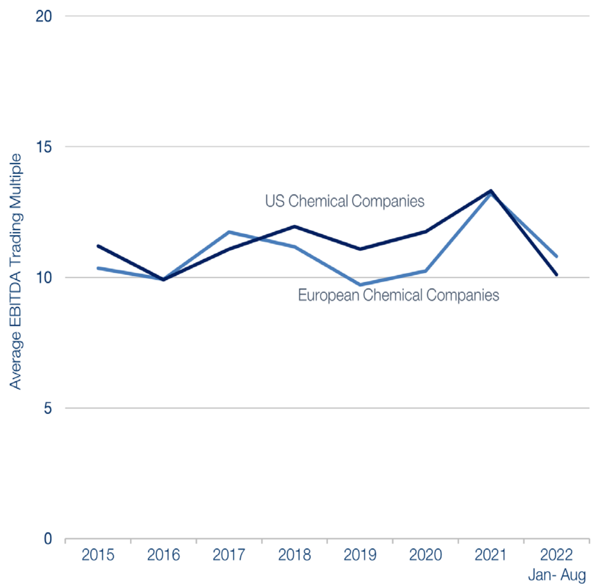
There is sometimes a mistaken belief that much of the recent decline in valuations is because European companies are being pulled lower by the energy crisis in the region. Doubtless gas availability and pricing is causing a problem for energy intensive businesses, but as shown in Figure 9, there is no difference in overall EV/EBITDA between European and North American companies.

There are some differences from year to year but as of currently (August/September 2022), the average trading multiple for European and US companies is almost identical.

Outlook for M&A

As chemicals M&A experiences an almost inevitable slowdown in deal volumes in the second half of 2022, we expect to see valuations broadly sustained at present levels. The complex interplay of the global economy, government and central bank responses, and political events will largely determine the outlook in 2023. Nevertheless with chemical company profitability expected to be resilient across many sectors, M&A transactions for higher quality businesses is forecast to remain strong. Additionally, with numerous company divestments and carve-outs delayed until 2023, the second half of next year is likely to see a meaningful bounce back in deal volumes.

Figure 9: Chemical Trading Multiples by Region



Piper Sandler and Capiq analysis. Based on US and European chemical companies

Piper Sandler Chemicals Group 2022 Transactions

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Perstorp
a portfolio company of
PAI Partners
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Valtris Specialty Chemicals
to
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arxada
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a portfolio company of
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has combined with
TROY
Financial Advisor

heubach
and
SK Capital
have acquired the Pigments business of
CLARIANT
Financial Advisor

BalmoralFunds
has acquired
TRECORA™ Resources
Financial Advisor

SK Capital
has sold
TECHMER PM Polymer Modifiers
to
Gryphon Investors
Financial Advisor

H.I.G. Capital
is acquiring the Distribution business of
AVIENT™
Financial Advisor

SJL Partners
and
SD BIOSENSOR
are acquiring
meridian BIOSCIENCE®
Financial Advisor

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Specialization Delivers Special Results

Lead advisor on largest ever chemical LBO

$11.7 billion

The Carlyle Group GIC

have acquired the
Specialty Chemicals business of

AkzoNobel

now known as

Nouryon

Financial Advisor

Lead advisor on second largest chemical LBO

$5.2 billion

Platinum Equity

has acquired

Solenis

from

Clayton Dubilier & Rice BASF

Financial Advisor

Lead advisor on third largest chemical LBO

$4.7 billion

BainCapital

Cinven

have acquired the
Specialty Ingredients business of

Lonza

Financial Advisor

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allnex
from
Advent International
GLOBAL PRIVATE EQUITY
Financial Advisor

EVERARC
has acquired
Perimeter SOLUTIONS
Quality Products. Exceptional Response.
from
SK CAPITAL
Financial Advisor

SK CAPITAL
has acquired
SEQENS
from
EURAZEO
Financial Advisor

NAUTIC
has sold
SPARTECH
to
THE JORDAN COMPANY
Financial Advisor

FALCON
PRIVATE HOLDINGS
has sold
ARISTECH
SURFACES
to
TRINSEO
Financial Advisor

AEA
has acquired
VERDESIAN
from
PAINE SCHWARTZ PARTNERS
Financial Advisor

AURORA CAPITAL PARTNERS
has acquired
SPRAY-TEK
Financial Advisor

MOMENTIVE
jointly owned by
KCC
SJL PARTNERS
has sold its
Consumer Sealant business to
Henkel
Financial Advisor

CLARIANT
has sold its
Masterbatches business to
PolyOne
Financial Advisor

INDORAMA
VENTURES
has acquired the
Integrated Oxides and Derivatives
businesses of
HUNTSMAN
Financial Advisor

synthomer
has acquired
OMNOVA
SOLUTIONS
Financial Advisor

ARKEMA
has acquired
ArrMaz
from
GOLDEN GATE CAPITAL
Financial Advisor

INEOS
has acquired the
Ashtabula, OH Titanium
Dioxide plant of
TRONOX
Financial Advisor

SK CAPITAL
has acquired the Performance
Products and Solutions Division from
PolyOne
Financial Advisor

CPS PERFORMANCE MATERIALS CORP
a portfolio company of
ARSENAL
CAPITAL PARTNERS
has acquired
GEO
SPECIALTY CHEMICALS
Financial Advisor

GOLDEN GATE CAPITAL
has acquired
ActiveMinerals
INTERNATIONAL, LLC
from
MERIT CAPITAL PARTNERS
Financial Advisor

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FENZI
has partnered with
ARSENAL CAPITAL PARTNERS
Financial Advisor

Charlesbank CAPITAL PARTNERS LLC
has sold
PLASKOLITE
to
PPC Partners
Financial Advisor

DUNES POINT CAPITAL
has sold
MILLER
to
HUBER
Financial Advisor

INEOS
has acquired the Composites business and German BDO plant of
Ashland
Financial Advisor

The Carlyle Group | GIC
have acquired the Specialty Chemicals business of
AkzoNobel
now known as
Nouryon
Financial Advisor

Solenis
a portfolio company of
Clayton Dubilier & Rice
has merged with the Paper and Water Chemicals business of
BASF
Financial Advisor

ChemicalInvest
a joint venture of
DSM | CVC Capital Partners
has sold
FIBRANT
to
HSC
Financial Advisor

US Silica
has acquired
EP Minerals
a portfolio company of
GOLDEN GATE CAPITAL
Financial Advisor

SK CAPITAL
has acquired the Fire Safety and Oil Additives businesses of
ICL
Financial Advisor

ITAÚSA
has sold
Elekeiroz
to
H.I.G. CAPITAL
Financial Advisor

EP Minerals
a portfolio company of
GOLDEN GATE CAPITAL
has acquired the Bleaching Clay and Mineral Adsorbents business of
BASF
Financial Advisor

ARCHROMA
a portfolio company of
SK CAPITAL
has been recapitalized
Financial Advisor

Quaker
has acquired
HOUGHTON
from
Gulf
Financial Advisor

NMC
New Mountain Capital LLC
has partnered with
Gelest
Financial Advisor

Niacet
has been sold to
SK CAPITAL
Financial Advisor

ROCKWOOD | THEBE
have sold
Safripol
to
KAP
Financial Advisor

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EVONIK
has acquired the Silica business of
HUBER
Financial Advisor

INEOS
has sold its Expandable Polystyrene business to
synthos
Financial Advisor

eurazeo
has acquired
novacap
a portfolio company of
ARDIAN
Financial Advisor

Arsenal Capital Partners
has sold
ROYAL ADHESIVES & SEALANTS
to
AMERICANSECURITIES
Financial Advisor

nubiola
has been sold to
FERRO
Financial Advisor

INEOS SOLVAY
has sold certain Chlorvinyls businesses as a remedy to secure European Commission approval of INOVYN, their planned PVC JV, to
INTERNATIONAL CHEMICAL INVESTORS GROUP
Financial Advisor

DOW
has sold its Sodium Borohydride business to
Vertellus
a portfolio company of
WIND POINT PARTNERS
Financial Advisor

cbpe capital
has sold
Warwick Chemicals
to
Lubrizol
Financial Advisor

Arsenal Capital Partners
a portfolio company of
ACCELLA POLYURETHANE SYSTEMS
has sold its Plastisols business to
PolyOne
Financial Advisor

HSC CORPORATION
(Zhangjiagang, China)
has been sold to
CYG
ChangYuan Group
(Shenzen, China)
Financial Advisor

Permira
has acquired
CABB
from
Bridgepoint
Financial Advisor

canexus
has been sold to
CHEMTRADE
Financial Advisor

TESSENDERLO GROUP
has sold its Compounds business to
MITSUBISHI CHEMICAL
Financial Advisor

CYTEC
has sold its Building Block Chemicals Division to
H.I.G. CAPITAL
Financial Advisor

Niacet
has acquired
ChemSolutions B.V. from
Kemira
Financial Advisor

PolyOne
has sold its 50% ownership interest in SunBelt Chlor Alkali Partnership to
Olin
Financial Advisor

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