

SPECIALTY CHEMICALS

February 10, 2024

Materials Sector

Stock Rating

Market Weight

Investment Thesis

We recommend a market weight rating for the Specialty Chemicals Industry over the next year. In 2023, chemical output grew less than 1% year over year with specialty chemical output declining by 2.5%.¹ Despite lower chemical production, the outlook for 2024 is brighter with expectations of 2.9% growth as global production picks up, according to the IMF.

Drivers of Thesis

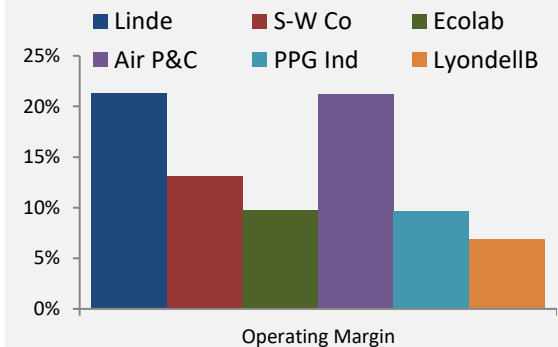
- With the Asia Pacific region accounting for 49.9% of global specialty chemicals revenue and China leading annual sales, the industry is poised to capitalize on the rapid industrialization and urbanization across these markets.
- The CHIPS Act and Inflation Reduction Act have driven investments of \$166 billion in semiconductors and \$88 billion in clean energy, increasing demand for specialty chemicals essential to these technologies.
- The cosmetics market has grown up to 10% yearly, reflecting a strong demand for specialty chemicals, driven by technological innovation and a trend toward natural, sustainable products.

Risks to Thesis

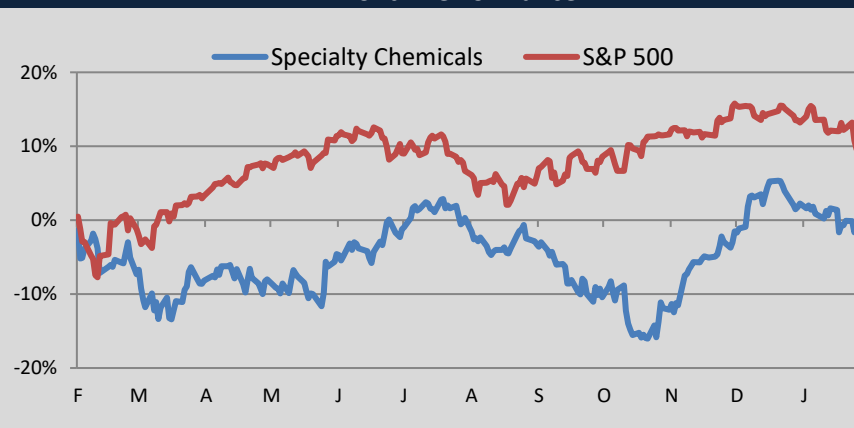
- The chemical industry is facing a significant destocking challenge, with capacity utilization at around 70% and inventories remaining high. This event has decreased demand and increased energy costs, impacting industry profitability.
- High interest rates and inflationary pressures continue to strain the specialty chemicals industry. The cost of production and raw materials has escalated, forcing companies to manage costs while maintaining competitiveness in an increasingly complex environment.

Key Industry Metrics

Market Cap	(in Billions)
Linde	\$215.4
Sherwin-Williams Co	\$79.3
Ecolab	\$57.8
Air Products & Chemicals	\$47.8
PPG Industries	\$32.8
LyondellBasell Industries	\$30.6
P/E	
Linde	33.1
Sherwin-Williams Co	33.4
Ecolab	47.2
Air Products & Chemicals	20.5
PPG Industries	26.0
LyondellBasell Industries	30.6
EV/EBITDA	
Linde	18.0
Sherwin-Williams Co	21.1
Ecolab	19.5
Air Products & Chemicals	17.9
PPG Industries	14.0
LyondellBasell Industries	12.9



12 Month Performance



Industry Description

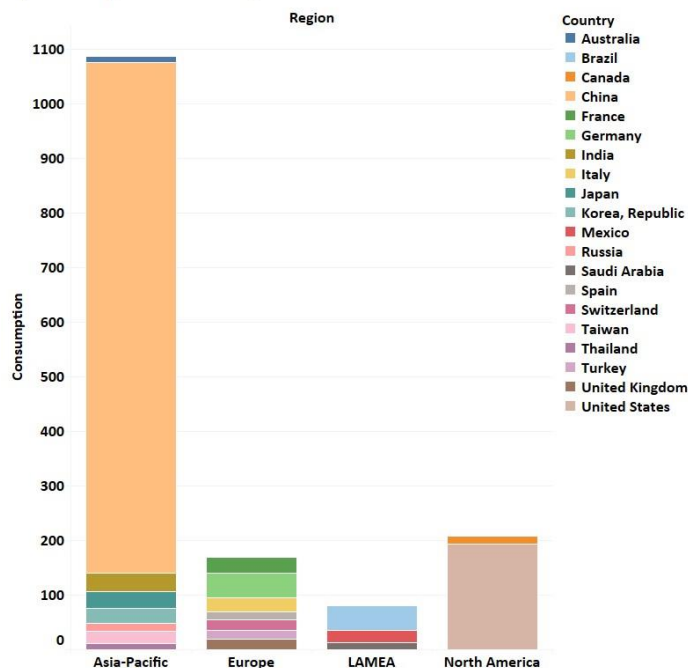
The specialty chemicals industry, a key part of the broader chemical sector, focuses on producing small volumes of chemicals for specific applications. Segments include agrochemicals, paints and coatings, food additives, water treatment chemicals, catalysts, electronic chemicals, and plastic and textile additives among others, each serving different customer bases. This industry promotes innovation and is essential for various sectors of the economy and everyday life.

INDUSTRY DESCRIPTION

Specialty chemicals play a crucial role across the entire economy, serving not merely as inputs but as foundational materials required in the creation of everyday products that enhance our quality of life. This industry is characterized by its dynamic nature that focuses on creating a wide range of products tailored to meet sector-specific needs. Hence, the specialty chemicals industry demands constant innovation and is consistently focusing on new product development. Manufacturers in this industry are not only providers but also partners that collaborate with other companies, universities, and research organizations to develop commercial products. The collaborative environment has also resulted in an industry with moderate levels of mergers & acquisitions that have allowed key players to expand their client base as well as product portfolio.

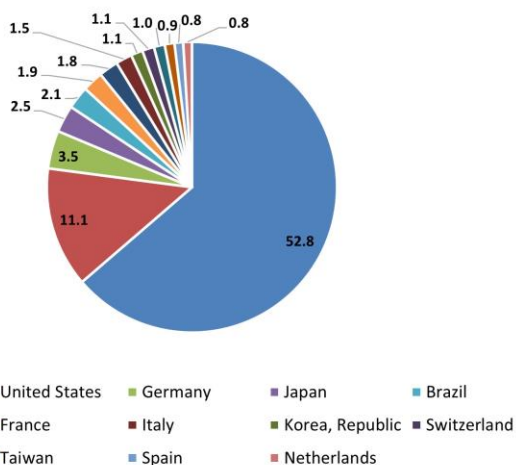
as food and beverages, personal care, cosmetics, and pharmaceuticals.

Leading Countries in Consumption of Specialty Chemicals, 2022



Source: Statista

Global specialty chemicals revenue distribution 2022



Source: Statista

In 2023, the global specialty chemicals market size was valued at \$641 billion in 2023 with the Asia Pacific region accounting for 49.9% of the global revenue.² China has positioned as the leader representing over half of the annual sales complemented by the contributions of India and Japan which are also major players in the industry. The substantial share is attributed to factors such as economic progress, industrialization, and the expansion of major end-use sectors within the region. The demand within the region is driven by the need for additives across various applications, particularly in industries such

Worldwide consumption of specialty chemicals is also dominated by the Asia-Pacific region led by China with 936.8 billion in consumption. This country is the largest consumer of antioxidants and catalysts for petroleum refining. China’s extensive manufacturing facilities across various industries along with its rapid industrialization, urbanization, and economic growth have contributed to increased local consumption of specialty chemicals. For these reasons, we do not anticipate the industry to shift its production out of China any time soon.

The United States is the second largest consumer accounting for 193.2 billion. North America is the leading consumer of biocides, corrosion inhibitors, cosmetic and personal hair chemicals, food additives, and industrial and institutional cleaners. In Europe, countries like Germany and France lead the way as main consumers of nutraceuticals. Additionally, in Latin America, the rapid expansion of construction activities has increased the demand for construction chemicals and materials. Finally, in Middle Eastern countries the demand for oilfield chemicals has increased exponentially and it is expected to continue driving market growth. These regional

production and consumption patterns reflect strategic specialties and economic strengths unique to each area, showcasing a global industry that is both diverse and specialized.

Despite being a sub-industry of the broader chemical sector, the specialty chemicals industry is extensively sub-segmented due to its focus on making very specific products for different sectors and regions. The global specialty chemicals market is segmented based on type and region.⁴ Region-wise, the industry is analyzed across North America, Europe, Asia-Pacific, and LAMEA. Depending on type, there are at least 15 different segments within the industry, each serving unique market needs. However, only the top 5 will be discussed in this section.

Agrochemicals

The agrochemicals segment focuses on producing substances used in agriculture to increase crop growth and protect them from various threats such as pests, diseases, and weeds. Chemicals manufactured in this segment include fertilizers, plant growth regulators, soil conditioners, pesticides, herbicides, and fungicides. This segment plays an important role in addressing the global challenge of food security and sustainable agriculture. Below is a table with companies that operate in the agrochemicals segment.

Company	Ticker	Market Cap (B)	Revenue	Net Income
Corteva Inc	CTVA	37.51	17,226	929
Nutrien Ltd	NTR	24.24	37,884	7660
CF Industries	CF	14.61	11,186	3346

Source: FactSet

Paints and Coatings

Paint can be defined as a mixture or dispersion of opaque pigments or powders in a liquid or vehicle. Coatings include other materials that can be considered paint-like in their use such as varnishes and inorganic binders.⁵ This segment produces chemicals used to protect surfaces against corrosion, UV radiation, wear, and environmental damage. Each of these products is engineered to meet the specific needs of the industry they serve, playing an essential role in product lifecycle, safety, and functionality. The table below showcases examples of companies that operate within this segment.

Company	Ticker	Market Cap (B)	Revenue	Net Income
Sherwin Williams Co	SHW	79.89	23,051	2,388
PPG Industries	PPG	32.68	18,246	1,270
RPM International	RPM	13.72	7,256	476

Source: FactSet

Electronic Chemicals

This segment specializes in producing chemicals used in manufacturing semiconductors, integrated circuits, and silicon wafers among others essential to produce electronic devices. Below are examples of companies that operate in the electronic chemicals segment.

Company	Ticker	Market Cap (B)	Revenue	Net Income
Linde Plc	LIN	200.74	32,854	6,199
Air Products & Chemicals	APD	48.88	12,599	2,292
Dow Inc	DOW	37.83	44,622	578

Source: FactSet

Construction Chemicals

The construction chemicals segment plays an important role in all sorts of construction projects. They are used to enhance the strength, durability, and functionality of buildings and infrastructure. The following chart shows examples of companies that operate within this segment.

Company	Ticker	Market Cap (B)	Revenue	Net Income
Dupont de Nemours	DD	28.85	12,068	494
Eastman Chemical	EMN	9,839	9,210	894
Huntsman Corporation	HUN	4,181	8,023	448

Source: FactSet

Cosmetic Chemicals

Cosmetic chemicals are substances used in the formulation of various cosmetic and personal care products. These chemicals are used to enhance product stability, improve texture, provide color, and preserve the

product's shelf life. Cosmetic chemicals include emollients, surfactants, preservatives, fragrances, and colorants, among others.⁶ The table below shows companies that operate within the cosmetic chemicals segment.

Company	Ticker	Market Cap (B)	Revenue	Net Income
Ashland Inc	ASH	4.57	2,191	168
Chemours Co	CC	4.45	6,794	578

Source: FactSet

RECENT DEVELOPMENTS

Chemical Industry Destocking

The chemical industry is currently facing a significant destocking challenge as inventories of key chemicals remain historically high. Capacity utilization across the industry was around 70% in 2023⁷ meaning that despite companies running at a relatively lower capacity, most materials are still abundant due to the decrease in demand. This number is below historical levels.

The situation was caused by the supply-chain disruptions and stock-outs triggered by the COVID-19 pandemic which led to an artificial inflation of demand as companies over-purchased raw materials. However, supply conditions normalized quicker than anticipated resulting in excess inventory across the value chain. This issue was further complicated by the sharp increase in interest rates and geopolitical events, such as the Russia-Ukraine crisis which decreased demand in Europe and drove up energy costs, adding pressure to an already strained industry. The presence of excess inventory alongside low-capacity utilization significantly influences pricing strategies and margins for companies in this industry.

The destocking trends are more pronounced in the automotive and construction end-use markets. In the automotive sector, the disruptions and subsequent semiconductor shortages led to this inventory buildup. Similarly, the construction sector has experienced significant destocking, influenced by higher interest rates which dampened the housing market.

Although destocking will likely transition to restocking in 2024, we believe that specialty chemical companies must proceed with caution, and they must carefully balance

their immediate and future strategic goals to navigate these market conditions effectively.



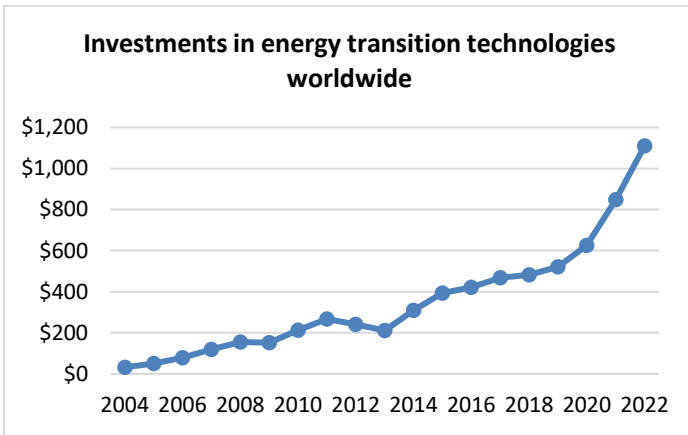
Source: St. Louis Fed (\$millions)

Energy Transition

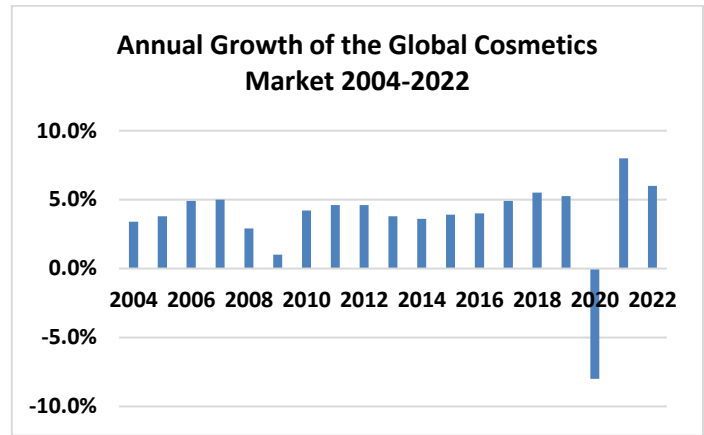
Energy transition refers to the global energy sector's shift from fossil-based systems of energy production and consumption to renewable energy sources.⁸ In July 2022, Congress enacted the Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act that sought to bolster US semiconductor capacity while implementing clean technology. Then in August of that same year, the federal government made the single largest investment in climate and energy in American history through the Inflation Reduction Act (IRA).

The legislation and stakeholder pressure have increased investments in the energy transition and thus demand for specialty chemicals. After the implementation of the CHIPS Act, there was a significant surge in private sector commitments, with \$166 billion directed towards semiconductor manufacturing investments.⁹ Similarly, in 2023, a year after the enactment of the IRA, there were approximately \$88 billion in announcements for clean energy manufacturing investments.¹⁰ This showcases the impact of these legislative measures on stimulating industry growth and investment in key technological sectors consequently causing a surge in manufacturing activities that rely on chemicals and materials.

Even though overall chemical demand was soft in 2023, we anticipate the demand for chemicals and materials supporting the energy transition to grow in 2024 and beyond, reflecting the positive economic impact of these policies in the industry.



Source: Statista



Source: Statista

INDUSTRY TRENDS

Growth in Cosmetic Chemicals

The market for cosmetic chemicals has been experiencing significant growth in recent years. This growth can be attributed to several factors, including rising consumer awareness about personal grooming and hygiene, increasing disposable income, and a growing focus on appearance and beauty across the globe. Additionally, advancements in cosmetic technology and the development of innovative and specialized cosmetic products have further increased the demand for cosmetic chemicals.

Moreover, the market is also witnessing a shift towards natural and organic cosmetic chemicals, driven by the growing preference for sustainable and eco-friendly products. As the beauty and personal care industry continues to evolve, the need for innovative and high-quality ingredients also rises. Specialty chemicals play a crucial role in developing these products, offering tailored solutions like active ingredients, preservatives, and texture enhancers. This demand leads to increased R&D investments in the specialty chemicals sector, driving growth and innovation.

We anticipate the cosmetics industry to continue growing in the short term as it benefits from the increased popularity of skincare products and the impact of social media. However, the excess growth it has seen in the past few years is not sustainable in the long term. Consensus estimates expect the industry to start decreasing between 2027 and 2028.³

M&A Activity

The specialty chemicals industry is characterized by its collaborative environment in the development of new products and active mergers and acquisitions landscape. The biggest drivers of M&A include consolidation and portfolio extension. Companies actively engage in M&A to streamline operations, expand their product ranges, and strengthen market positions¹⁷. Recent trends indicate significant activity in the agrochemicals segment. This subindustry has seen a notable number of transactions, influenced by the need to consolidate to achieve scale and efficiency gains.¹⁸

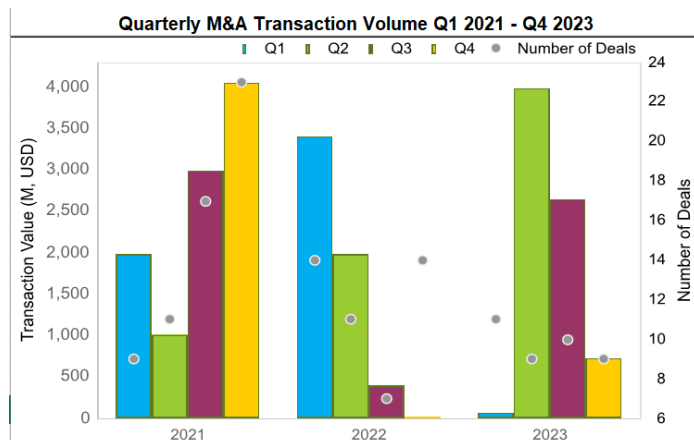
Below is a table with recent M&A deals in the specialty chemicals industry for the peer group.

Company	Acquired	Close Date	Transaction Value (\$M)
INEOS AG	LyondellBasell's Ethylene Oxide & Derivatives business	Pending	\$700
INEOS AG	Eastman Chemical's Texas City Operations	Dec-23	\$490
Sherwin Williams Co	Industria Chimica Adriatica SpA	Oct-22	Not disclosed

Source: FactSet

In 2023, higher interest rates, credit tightening, macro and geopolitical concerns, and recessionary fears caused compression for many deals. Despite all of that, there was

a total of 145 deals between Q1 of 2021 and Q4 of 2023. While the transaction value increased by +6258.6% in Q4 2023 compared to Q4 2022, the number of deals decreased by -35.71% during the same period. This suggests that while there were fewer deals in Q4 2023, the deals that did occur were of much higher value, indicating a trend towards larger and potentially more strategic M&A activities within the industry.



Source: FactSet

The Henry Fund anticipates M&A activity to continue to increase as the industry transitions from a phase of destocking to restocking. The increase in M&A transactions is expected as supply chains stabilize and the demand for chemicals continues to normalize. As these dynamics unfold, we believe firms will look to strategic acquisitions to strengthen their market positions, expand into new geographic regions, or acquire technologies that enhance their production capabilities.

MARKETS AND COMPETITION

Degree of Rivalry/Competition

The specialty chemicals sector is characterized by unique products that are often tailored to specific customer requirements. The emphasis on brand identity and product specialization reduces direct price competition, making the market less about cost and more about the value and performance of the offerings. Additionally, innovation and technological advancements play a crucial role in keeping the competition vibrant but less price-focused compared to basic chemicals.

Power of Buyers

For products in the specialty chemicals industry, customers usually have limited alternatives, which diminishes their bargaining power. The specificity of applications for specialty chemicals means that customers often invest in supplier relationships, relying on the technical support and consistent quality provided by their vendors. This interdependence typically results in more stable long-term partnerships and lower price sensitivity.

Power of Suppliers

Suppliers of specialty chemicals have a high power due to the specialized nature of their products and the limited number of suppliers. This can often lead to a scenario where suppliers set the market terms. The industry maintains good relationships with key suppliers and may engage in strategic partnerships or long-term contracts to ensure supply chain stability.

Threat of Substitutes

The specialty chemicals industry is less capital intensive, but it faces a constant threat of substitution through new and innovative products and from international manufacturers with different environmental and labor standards. This global competition often leverages cost advantages that challenge local producers. Companies in this industry must continuously innovate as competitors are always looking to offer more efficient alternatives. This dynamic promotes significant investments in research and development (R&D) to maintain competitive advantage. Finally, as a commodity-based industry, it is crucial to manage cost structures effectively, as competition is often narrowed down to price due to minimal product differentiation.

Threat of New Entrants

The lower capital requirements for entry into some segments of the specialty chemicals market increase the threat of new entrants, especially in emerging economies such as India. This is particularly true for niche markets where small and medium-sized enterprises can compete effectively against larger firms by focusing on a limited range of products and providing highly specialized solutions. However, the high level of investment required to establish a new manufacturing facility in addition to the need for technical expertise, quality control, and

established brand recognition can serve as barriers to entry, protecting existing market players to some extent.

Competitive Landscape

Based on the previous analysis, the structure of the specialty chemicals industry is defined by a competitive environment that values innovation, brand strength, and product specialization over price competition. The industry is driven by the ability to meet specific customer needs through advanced and differentiated products. Thus, established firms with strong R&D capabilities and customer relationships are favored. However, it also presents opportunities for new entrants that can bring innovative solutions to niche markets.

Firms with strong innovation pipelines, effective supply chain management, and strong brand identities are best positioned to compete effectively in the specialty chemicals industry. These firms are typically price setters, pricing due to the specialized nature of their products. vulnerable to market pressures and the threat of substitutes.

Going forward, the competitive landscape is likely to be shaped by the ability of firms to adapt to technological advancements, changes in customer preferences, and regulatory developments, especially those related to environmental sustainability. Companies that can lead in these areas are more likely to establish themselves as industry leaders, while those that do not adapt to a constantly evolving environment are likely to fail.

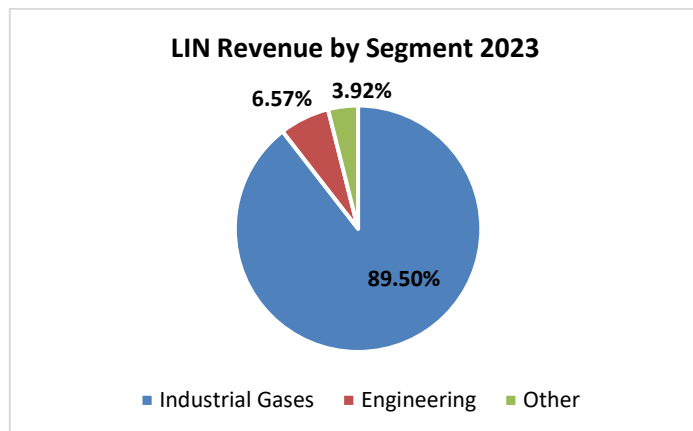
This section should describe the competitive landscape of the markets that the firm competes in. Discuss the forces of competition that shape the industry. Analysts may use Porter’s 5-Forces model as an initial guide, but only those forces that are important factors in the industry need to be discussed. If you do include a 5-forces analysis, keep in mind that the most important part is the conclusion at the end regarding what each of the forces means for how firms are competing within the industry.

Key Players

Linde Plc (LIN)

Linde Plc designs and builds equipment that produces industrial gases. The company also offers gas production and processing services such as olefin plants, natural gas plants, air separation plants, hydrogen and synthesis gas

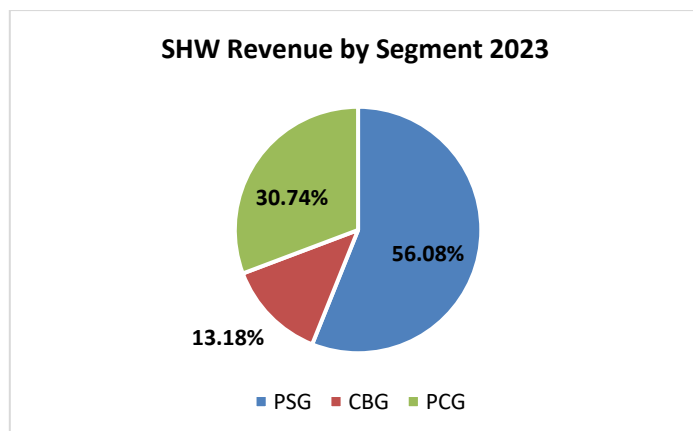
plants, and other types of plants. Its primary products are atmospheric gases and processed gases. The company operates through the following reportable segments: Industrial Gases, Engineering, and Other.



Source: FactSet

Sherwin-Williams Company (SHW)

The Sherwin-Williams Co. engages in the development, manufacture, distribution, and sale of paint and coatings. It operates through the following segments: Paint Stores Group (PSG), Consumer Brands Group (CBG), and Performance Coatings Group (PCG). The company was founded by Henry Sherwin and Edward Williams in 1866 and is headquartered in Cleveland, OH.

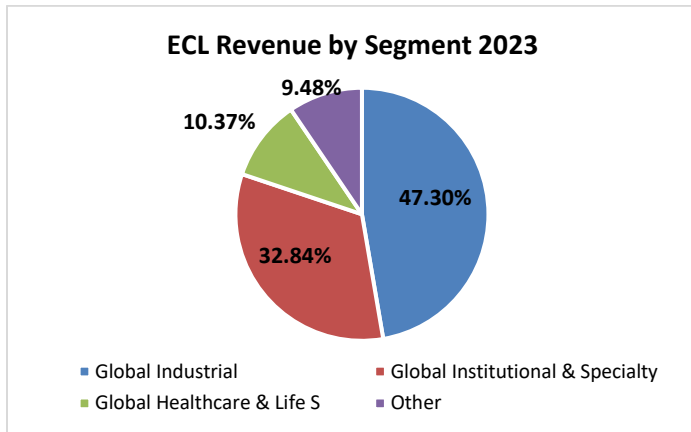


Source: FactSet

Ecolab Inc (ECL)

Ecolab is a corporation headquartered in Saint Paul, Minnesota. It develops and offers services, technology, and systems that specialize in the treatment, purification, cleaning, and hygiene of water in a wide variety of applications. It helps organizations, both in private as well as public markets, treat their water for drinking use and

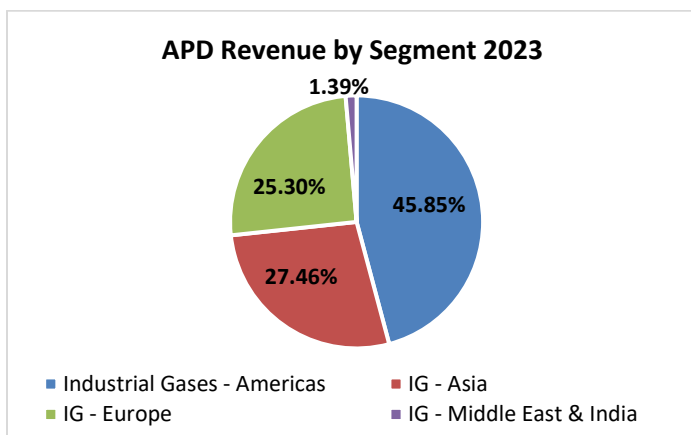
use in food, healthcare, hospitality-related safety, and industry. Ecolab’s revenues are broken into four different segments: Global Industrial, Global Institutional & Specialty, Global Healthcare & Life Sciences, and Other.



Source: FactSet

Air Products and Chemicals Inc (APD)

Air Products & Chemicals, Inc. engages in the manufacture and distribution of atmospheric gases. It operates through the following segments: Industrial Gases - Americas, Asia, Europe, and Middle East & India. It sells gases to customers in the refining, chemicals, metals, electronics, manufacturing, medical, and food industries. The company was founded by Leonard Parker Pool on September 30, 1940, and is headquartered in Allentown, PA.

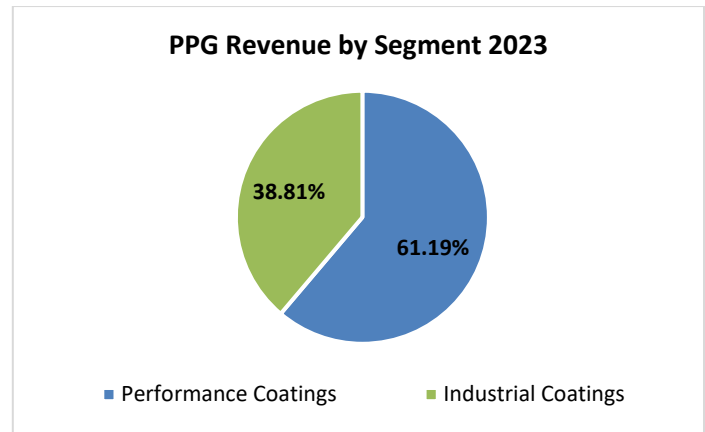


Source: FactSet

PPG Industries (PPG)

PPG Industries, Inc. engages in the manufacture and distribution of paints, coatings, and specialty materials. It operates through the Performance Coatings and Industrial Coatings segments. The Performance Coatings segment

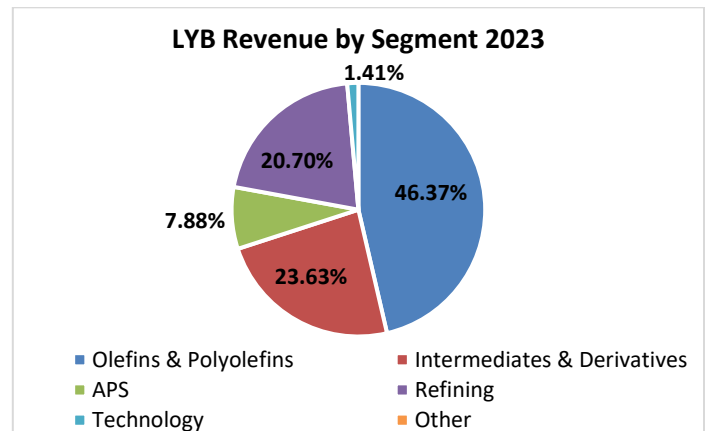
supplies a variety of protective and decorative coatings, sealants, and finishes along with pavement marking products. The Industrial Coatings segment includes a variety of protective and decorative coatings and finishes along with adhesives, sealants, and metal pretreatment products. The company was founded by John B. Ford and John A. Pitcairn in 1883 and is headquartered in Pittsburgh, PA.



Source: FactSet

LyondellBasell Industries (LYB)

LyondellBasell Industries NV engages in the refinery and production of plastic resins and other chemicals. It operates through the following segments: Olefins and Polyolefins; Intermediates and Derivatives; Advanced Polymer Solutions (APS); Refining; and Technology. The company was founded in 2007 and is headquartered in London, UK.



Source: FactSet

As we can see, these companies are all part of the specialty chemicals industry, however, they do not necessarily focus on the same product lines.

Financial and Operating Metrics

Market Valuation

Ticker	Market Cap (B)	P/E
LIN	202.11	33.11
SHW	79.31	33.46
ECL	57.88	47.21
APD	47.87	20.57
PPG	32.86	26.05
LYB	30.64	30.64

Source: FactSet

Based on the table above, we can see that Linde (LIN) has a market cap significantly higher than the others, suggesting it is the biggest and possibly the most influential company in this group. Its size might imply a wider global reach or a more diversified product line. Additionally, Linde (LIN), Sherwin-Williams Co (SHW), and Ecolab (ECL) have P/E ratios above 30, signaling that the market may have high expectations for their future earnings growth.

Air Products and Chemicals (APD) has a P/E ratio notably lower than the others, implying it is priced more conservatively relative to its earnings, which might attract investors looking for value or those with a more cautious growth outlook. PPG Industries (PPG) and LyondellBasell (LYB) have P/E ratios that are in the middle range of the group, suggesting a moderate expectation of growth relative to the others. This snapshot reflects not just the companies' current profitability but also investor speculation on their prospects, with higher P/E ratios reflecting more optimistic future earnings growth expectations.

Profitability Ratios

Ticker	Net Margin	ROA (%)	ROE (%)
LIN	18.87	7.73	15.55
SHW	10.36	10.49	70.07
ECL	7.69	5.12	15.1
APD	18.2	7.75	16.7
PPG	6.96	5.81	17.88
LYB	5.16	6.08	16.43

Source: FactSet

The profitability ratios presented in the table show efficiency and effectiveness presented among the companies in deploying their resources. Linde (LIN) and Air Products and Chemicals (APD) lead with high net margins, indicating high profitability relative to sales. Sherwin-Williams Co (SHW) stands out with a high ROE, which reflects its strong leverage and high returns to shareholders.

Ecolab (ECL) and LyondellBasell (LYB) show lower net margins, suggesting tighter profitability from their sales, which could be due to a variety of factors like competitive pricing or higher cost structures. Their ROA and ROE imply a less robust return on investment and equity, respectively. Additionally, PPG Industries (PPG) reports the lowest net margin, which signals cost management challenges or investment in growth opportunities that have yet to realize returns.

Industry Ratios

Ticker	R&D % of Sales	EV/EBITDA
LIN	0.44%	18.05
SHW	0.52%	21.18
ECL	1.34%	19.51
APD	0.84%	17.9
PPG	2.37%	14.09
LYB	0.27%	12.99

Source: FactSet

Specialty chemicals are often tailored to specific industries or customers and require ongoing innovation and customization, which can necessitate greater R&D investments compared to generic chemicals. In the table above, PPG Industries (PPG) shows a robust investment in R&D relative to its sales, indicating a strategic push towards innovation. In contrast, Linde (LIN) and Sherwin-Williams (SHW), while being the largest companies by market cap, invest relatively less in R&D. This could be indicative of their mature stage in the business life cycle, where the focus might shift towards refining existing technologies and processes, capital distribution, and maintaining market position rather than seeking breakthrough innovations.

On the valuation side, Sherwin-Williams (SHW) has the highest EV/EBITDA ratio, which implies market expectations of future growth or a premium for its earnings quality. Conversely, LyondellBasell (LYB) has the lowest EV/EBITDA ratio, suggesting it may be undervalued or present a more attractive entry point for investors,

while its lower R&D percentage could imply a more immediate focus on operational efficiency or capital returns.

Capital Structure Ratios

Ticker	D/E Ratio	Debt Rating (Moody's)
LIN	0.48	A2
SHW	3.17	Baa2
ECL	1.08	A3
APD	0.70	A2
PPG	0.85	A3
LYB	0.99	Baa2

Source: Bloomberg

In the table above, we see a diverse approach to debt and equity financing among the peer group. Linde (LIN) shows a conservative capital structure with the lowest D/E ratio of 0.48, which is reflected in its favorable A2 credit rating by Moody's. In contrast, Sherwin-Williams Co (SHW) employs a more aggressive strategy with the highest D/E ratio at 3.17, correlating with a lower credit rating of Baa2, indicative of moderate credit risk. Air Products and Chemicals (APD) and PPG Industries (PPG) maintain moderate D/E ratios of 0.70 and 0.85, respectively, aligning with their solid A2 and A3 ratings and suggesting prudent financial management. Finally, Ecolab (ECL) and LyondellBasell (LYB) present D/E ratios that suggest a balanced financial strategy, with ECL's slightly higher leverage of 1.08 and an A3 rating, while LYB's equilibrium at 0.99 coincides with a Baa2 rating, the same as SHW, highlighting that credit ratings are influenced by a multitude of factors, not just leverage metrics.

ESG Scores

Ticker	ESG Score	Risk
LIN	11.3	Low
SHW	29.5	Medium
ECL	24.7	Medium
APD	12.5	Low
PPG	25.2	Medium
LYB	20.7	Medium

Source: FactSet

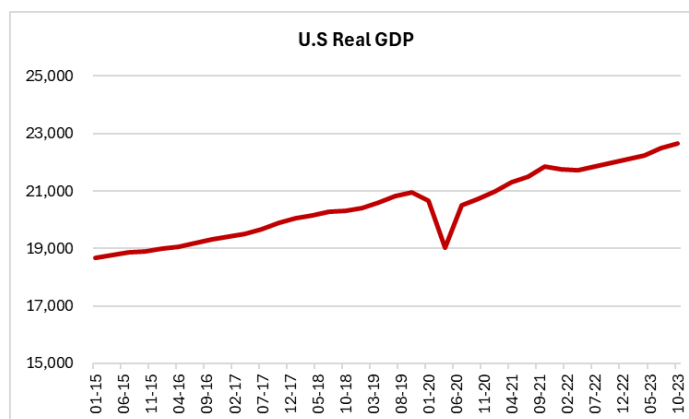
Although ESG is not an industry-specific metric, it has become significantly important for specialty chemical companies. As sustainability gains relevance in business

strategies and investor decisions, a strong ESG rating influences a company's market perception, risk profile, and long-term viability. In this case, Linde (LIN) and Air Products and Chemicals (APD) have the lowest ESG risk score suggesting that the companies are managing their environmental, social, and governance obligations more effectively than the others and thus, making them more attractive to investors who prioritize sustainable and ethical operations.

ECONOMIC OUTLOOK

Real GDP Growth

The US economy expanded 3.1% year-on-year in the fourth quarter of 2023, the strongest rise in about two years, following a 2.9% rise in Q3.¹¹ Although the U.S economy started 2024 on strong footing, the Conference Board forecasts overall GDP growth to slow to under 1% in Q2 and Q3 2024. Thereafter, inflation and interest rates should normalize, and quarterly annualized GDP growth should converge toward its potential of nearly 2 percent in 2025.¹²



Source: ST. Louis FRED

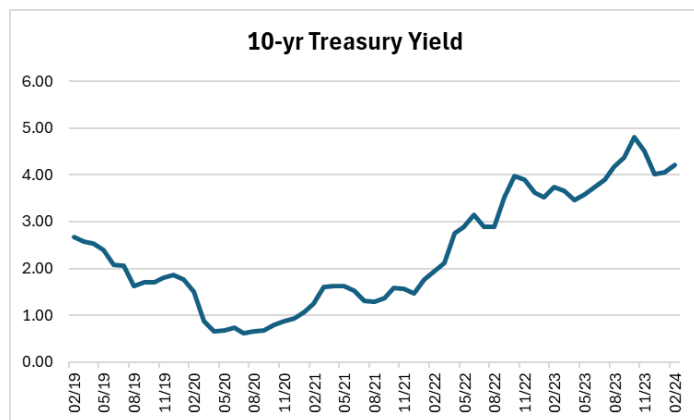
For the broader chemical industry, GDP growth directly correlates with the sector as it influences demand across various segments (including specialty chemicals). We believe that as the U.S. economy continues to stabilize, there will be a slowdown of GDP growth, yet it will remain positive. This could result in a moderation of demand for specialty chemicals.

Inflation and Interest Rates

According to the Congressional Budget Office, interest rates rose in 2023 as the federal funds rate increased to its highest level since 2001. In CBO's projections, that rate

begins to decline in Q2 for 2024. Interest rates on 10-year Treasury notes are expected to increase in 2024 and then fall through 2026.

Inflation rates, on the other hand, slowed significantly in 2023 compared to the previous year. In CBO’s projections, it slows further in 2024 to a rate like the Federal Reserve’s long-run goal of 2 percent, then it is expected to go up in 2025, before declining slightly.¹³



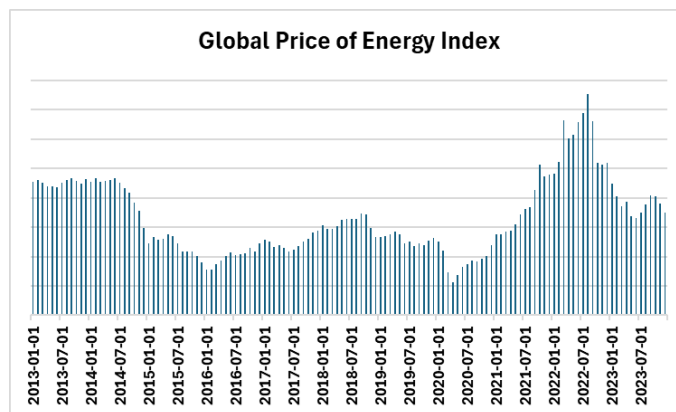
Source: St. Louis FRED

The specialty chemicals industry, being capital and resource-intensive, is significantly impacted by inflation because it affects the cost of raw materials and energy. High inflation can lead to elevated production costs, which can decrease profit margins. Additionally, interest rates, which are closely tied to inflation, influence the cost of capital. If inflationary pressures stay high, interest rates also remain at higher levels, impacting the industry’s investment and growth potential. Although there is general optimism regarding interest rates, we don’t believe they will decrease significantly, at least in the short term. As interest rates remain high, consumer spending is reduced which can lead to decreased demand for end products that use specialty chemicals, indirectly affecting the industry.

Energy Prices

Energy markets have been quite volatile over the last few years. Coming off of 15-year lows in 2019 to reaching 20-year highs in 2021. It is estimated that energy costs can account for around 10% to 50% of the production costs in the chemical industry, depending on the specific chemical products and the complexity of the manufacturing processes.¹⁷ The specialty chemicals industry is significantly influenced by global energy prices, driven by

factors such as the push for renewables, geopolitical conflicts, and political climate, especially in major economies like the U.S. Renewable energy’s higher costs, compared to fossil fuels, gradually increase electricity prices. However, shifts from natural gas decrease its demand, potentially stabilizing prices. With uncertainty around the coming U.S. presidential election and global tension between the Russia-Ukraine and Israel-Gaza conflicts, we believe that energy prices will increase into 2024. This directly impacts the specialty chemicals industry by elevating production costs along with the prices for raw materials, thus decreasing profit margins.



Source: St. Louis FRED

CATALYSTS AND KEYS TO MONITOR

Opportunities

The specialty chemicals industry has high opportunities for growth in emerging markets as they are witnessing rapid industrialization, urbanization, and infrastructure development. Additionally, as the energy transition continues to take place in industries that the specialty chemicals sector serves, new applications and opportunities emerge. Finally, the increasing customer demand for cosmetics and personal care products creates opportunities for manufacturers to develop innovative and tailored solutions (which is what the industry specializes in).

Challenges

Although it has been almost four years since the COVID-19 pandemic, the specialty chemicals industry is still facing challenges related to it due to the destocking crisis that has negatively impacted companies across the industry. Additionally, despite improving economic conditions and

increased optimism, high interest rates persist leading to increased costs of production and raw materials crucial to the industry. This scenario pressures the specialty chemicals industry as companies are in a complex situation in which they are trying to manage costs and at the same time remain relevant and up to date with technological and environmental advancements.

Keys to Monitor

Government Policies and Sustainability Initiatives:

Moving forward, the significance of government regulations and sustainability efforts will escalate as we become more environmentally conscious. Public and regulatory agencies are placing more pressure on the specialty chemicals industry to innovate with greener technologies and sustainable practices. Companies leading in environmental stewardship are poised to gain a competitive advantage.

Inflation and Interest Rates: The economic environment, marked by inflation and fluctuating interest rates, continues to impact investment decisions and growth potential within the industry. These factors influence the cost of borrowing and capital expenses, thus affecting strategic investments in R&D and sustainable solutions. Monitoring these economic indicators is essential for planning and resilience building.

Current Industry Destocking Crisis: The ongoing destocking phenomenon within the specialty chemicals sector must be closely observed as it will determine operational efficiency and financial health this upcoming year.

Recommendation and Conclusion

Considering the current market landscape, our analysis supports a market weight recommendation for the specialty chemicals industry. Key players such as Linde Plc (LIN) and Sherwin-Williams Co (SHW) demonstrate robust financial health with strong profitability ratios and strategic market positions. Linde, with its diversified product offerings and global reach, alongside Sherwin-Williams, known for its strong brand identity and innovation in coatings, is well-equipped to leverage growth opportunities in emerging markets and sustainability-focused sectors.

In conclusion, the specialty chemicals industry is characterized by its complexity and the critical role it plays in various sectors of the global economy. Companies like Linde Plc and Sherwin-Williams Co are optimally positioned to thrive due to their significant investments in research and development, as evidenced by their innovative product lines and strategic market expansions. However, it is important to note that SHW employs a more aggressive strategy when it comes to debt giving it a higher credit risk. LIN with a more conservative approach is a safer investment.

Conversely, companies such as LyondellBasell Industries (LYB), which have lower R&D investments and less focus on sustainability, might face more significant challenges amidst shifting global standards and consumer preferences. Moving forward, firms that continuously adapt to technological advancements and regulatory demands, particularly those about environmental sustainability, will likely lead the industry. Investors should closely monitor market and economic indicators to refine their strategies in this dynamic sector.

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