



# **Spotlight on India: Chemicals and Materials Market Update**

**February 2018**

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Indian chemicals industry is the 3rd largest producer in Asia and 7th in the world

Indian chemicals industry is expected to have a total market size of \$226bn by 2020, a CAGR of ~9.1% for next 5 years and is expected to grow at a rapid pace than the global market, which has growth forecasts of 5%-6%

Recent Government initiatives such as 'Make in India' and implementation of GST have made the Indian chemicals industry an attractive opportunity

## India's Chemicals Industry Offers a Unique Opportunity

The Indian chemicals industry, with a market size of \$147Bn as of FY15, is the 7th largest producer of chemicals worldwide and the 3rd largest producer in Asia after China and Japan. It has the potential to grow at 9.1% CAGR to reach \$226Bn by 2020 compared to 5.5% expected annual growth for the global chemicals industry over the same period.

India is emerging as one of the focus destinations for investments by global chemical companies due to increasing domestic consumption, low per capita consumption relative to developed countries and multiple Government initiatives. 'Make in India' is one such initiative which is expected to foster growth in the Indian chemical industry by enabling duty rationalization for feedstock, improving infrastructure and R&D & skill development along with tax incentives for R&D investments. The other key reform is implementation of the Goods and Services Tax (GST) Bill. This key tax reform is expected to lower logistics cost by 10-15% and create a unified market across the country. To facilitate greater investment in technology up-gradation and modernization, the Government has allowed 100% Foreign Direct Investment (FDI) through automatic approval route. These key developments have put the chemicals space in India on a strong footing leading to FDI equity inflows in the sector to increase by 115% to \$3.4Bn during two-year period from October 2015 – September 2017 as compared to \$1.6Bn during same period in 2013-15.

### 'Make in India'

Indian Government launched 'Make in India' in 2014 to encourage MNCs as well as national companies, to manufacture their products in India. The Indian Government has taken several initiatives under its 'Make in India' program to facilitate growth and investment in chemicals sector. The Government approved four Petroleum, Chemicals and Petrochemical Investment Regions (PCPIR) in 2015 which would have state of art infrastructure and common facilities. Each PCPIR is expected to attract \$50Bn in investments. In March 2017, Gujarat PCPIR, set up with an investment of \$4.6Bn, was inaugurated. On similar lines, the Government approved 10 plastics parks in September 2015. Construction of plastics parks is in full swing and completion of the first park in Sonapat, Haryana is expected in 2018.

### Potential Impact of GST

GST Bill, a pragmatic and progressive tax alteration, aimed at simplifying the complexity of the existing tax system, was implemented in India beginning July 1, 2017. The prime benefit of implementing the GST will be integration of the chemicals market nationally by decimating the tax complications grappling the interstate trade of chemical companies. The GST Bill will avoid any double taxation and keep the rates of state-level taxes consistent throughout the country, facilitating national trade. Consequently, the production costs and the resale prices of chemicals will be extensively lowered, urging the industry leaders to concurrently expand the gross production capacity of the chemicals sector in India. The GST Bill is trusted to be seminal for the unbarred progress of the Indian chemicals industry in the years to come.

### Ease of Doing Business

In 2014, the Government of India launched an ambitious plan of regulatory reforms aimed at making it easier to do business in India. One of the outcomes was The Insolvency and Bankruptcy Code, 2016 which paved the way for much needed reforms while focusing on creditor driven insolvency resolution. To improve trade, SWIFT (Single Window Interface for Facilitating Trade) has been launched which enables importers or exporters to file a common integrated declaration, instead of 9 forms across 6 agencies. These efforts, along with many others, resulted in India jumping 30 spots to rank 100th in the 2018 list compared to 130th in 2017. The Government has set a target of being in top 50 by 2020.

**"If you are not positioned in the Asian market, particularly India and China, you will have a difficult time running a successful business going forward because our most important customers have migrated over the past decade from Western Europe and North America to the East."**

**– Paul Hulme  
President, Textile Effects, Huntsman**

Large global chemicals companies have expanded their footprint in India and are using their Indian manufacturing footprint as a base to access the entire high growth region of emerging Asian markets

Indian chemicals industry has seen increased interest in the form of inbound M&A and India-focused investments from global chemicals companies in last couple of years

### Inbound M&A on the rise

The Indian chemicals industry has seen renewed interest from global chemicals companies looking to deliver growth to counter the challenging business environment elsewhere. Inbound M&A has been driven by several strategies:

- **Gaining market share:** Yara's acquisition of Tata Chemicals' Urea business in 2016; Evonik's acquisition of Monarch Catalysts in 2015
- **Enhancing product portfolio:** Clariant acquisition of Vivimed Labs' Personal Care chemicals business in 2015
- **Cost effective manufacturing base and strengthening supplier base:** Mane's acquisition of Kancor Ingredients in 2014
- **Acquiring distribution network:** Sumitomo's acquisition of Excel Crop Care in 2016; Nihon Nohyaku's acquisition of Hyderabad Chemicals in 2014

**"We are often faced with the strange situation that we purchase raw materials here, ship it to Europe, manufacture our products at significantly higher costs, and then ship them back to Asia, where our customers are. Obviously, this is against any economic logic and severely harms our competitiveness in these areas. Hence there is no value-creating alternative but transferring our production to here."**

– Hariolf Kottmann,  
CEO Clariant

### Recent Investments / JVs by Global Chemical Companies in India

- **October 2017:** Huntsman announced shifting manufacturing of more types of 'differentiated products' to India
- **August 2017:** Japan's Toray announced investment of \$156mm to manufacture technical textiles in India
- **June 2017:** Japan's Kumiai Chemicals enters into a 50:50 JV with India's PI Industries to manufacture and distribute agrochemical bispyribac sodium
- **June 2017:** Japan's Kansai Paints announces investment of \$80mm to construct 2 new manufacturing facilities in India
- **Mar 2017:** Of its planned EUR3Bn Asia focused investments, BASF announced that India will be getting major share of these investments
- **Mar 2017:** Dow Polyurethanes business announced 50% expansion of its manufacturing capacity base in India
- **Mar 2017:** H.B. Fuller completes \$20mm investments in India by setting up business offices and R&D centre
- **Nov 2016:** Novozymes announces DKK300mm investment to set up production and supply chain facility in Navi Mumbai, Maharashtra
- **Oct 2016:** Arkema builds powder coating plant in India for an investment of \$15mm

**"We wish to slowly and steadily increase manufacturing in India...exciting sector is the automotive industry with the catalyst emission expansion coming. Our forecast is that India will be third largest automotive producer in the world by 2020 after China and the US and before Japan and Europe. This is an exciting market for us. Also, we have products for industries in renewable energy, clean air and water. The government is driving regulations and expect to see more in India."**

– Sanjiv Gandhi  
Executive Director, BASF

Four key sub-sectors within India's chemicals space offer promising growth opportunities:

- Agrochemicals
- Construction Chemicals
- Dyes & Pigments
- Flavors & Fragrances

Indian agrochemicals market currently is the 4th largest globally and expected to reach \$7.5Bn by 2020, growing at a CAGR of 12%

Upcoming patent cliff offers huge growth opportunity for predominantly generics producing Indian agrochemicals market

Construction chemicals market in India is the fastest growing market globally and is expected to grow at 15% over the next 5 years, outpacing 12% growth expected in China

Highly untapped Indian construction chemicals market offers unparalleled opportunity

## Attractive Sub-Sectors within India's Chemicals Industry

We have identified 4 key sub-sectors in this newsletter within Indian chemicals industry which is expected to offer attractive growth opportunities.

### Agrochemicals

Agriculture accounts for 15% of India's GDP and is a primary source of livelihood for 58% of the rural population. Meeting the food & nutrition needs of a growing population requires an approach that puts thrust on increasing productivity against the background of decreasing yields and farm sizes. Agrochemicals will play a crucial role in increasing productivity and crop protection post-harvest.

India's agrochemical market is the 4th largest globally and is set to touch ~\$7.5Bn by 2020, growing at a 12% CAGR versus global agrochemicals growth of 5.5%. We see multiple growth triggers:

- Agrochemicals consumption in India is very low and stands at 0.6kg/ha compared to 13kg/ha in China and 7kg/ha in the U.S. In order to increase yield and ensure food security for its enormous population, agrochemicals penetration in India is bound to increase.
- ~\$4Bn worth of agrochemicals are expected to go off-patent by 2020 globally. India exports 45% of its domestic production and is a well-regarded supplier of generics at a low cost and of international quality.
- India's capability in low cost manufacturing, availability of technically trained manpower and price realization globally offers good scope for international companies to build manufacturing capacities here. These strategic opportunities are giving way to inbound M&A (e.g. Sumitomo's acquisition of Excel Crop Care).

The domestic market offers a huge opportunity and robust distribution network, with the ability to create brands and a strong product portfolio which will continue to be a key differentiator for agrochemical companies.

### Construction Chemicals

India's construction chemicals market stood at ~\$700mm in 2016, growing at CAGR of 14% over the past 5 years. India is the fastest growing construction chemicals market and is expected to grow at 15% over the next 5

years compared to an expected growth rate of 12% in China over the same period. Key drivers include:

- Several government initiatives like "Housing for All by 2022", development of smart cities, etc. is expected to ensure the growth momentum will continue in the future.
- Spending on concrete admixtures per sq. ft. of construction in India is half that of in China and less than one fourth of the U.S. This is driven by a focus on cost reduction and highlights the significant untapped potential of construction chemicals in India.
- Lack of penetration / awareness about benefits of construction chemicals. However, many manufacturers have started employing technically trained business development teams to educate end-users.

The Indian market is still at a nascent stage with significant growth opportunities. The overall market is fairly consolidated but there is considerable fragmentation of individual products and application areas. The top five players account for 50% of the market; the rest being accounted for by small and unorganized players. The key differentiators for companies will be brand awareness, product innovation and technical expertise.

### Dyes & Pigments

The market size of the Indian dyes & pigments colorants industry is estimated to be \$5.4Bn in FY15 and is expected to grow at 11.4% over next 5 years. India caters to ~18% of global dyes and pigments market, exporting ~80% of the total domestic production. Key growth triggers include:

- Growth in key end-use industries; paints and coatings industry is expected to grow at 5% CAGR, printing ink is likely to grow at 8% CAGR for next 5 years.
- Demand for high performance pigments (HPP). These are relatively high value pigments and are used in specialized and less price sensitive applications.
- Environmental consciousness: Increasing use of eco-friendly colorants such as low impact dyes is emerging, with features such as low water requirement to rinse off residues during dyeing and rinsing process, non-requirement of toxic mordants or heavy metals, etc.



India caters to ~18% of global dyes and pigments market, exporting ~80% of the total domestic production

Stringent environment pollution laws in China have caused several plant shut downs; Indian dyes & pigments market is well positioned to reap the benefits

Indian has 30% share in the global F&F ingredients market which is expected to increase to 40% in next 5 years

India is one of the largest producers of several natural ingredients such as mint, chilly, pepper, ginger and spices

Top 10 global F&F houses have their presence in the country with others looking to enter through M&A or by setting-up JVs

- Regulatory changes in China: Significant changes have been made to the Environment Protection Law which is likely to force small dye manufacturers to shut down, thereby benefiting Indian manufacturers.

There is significant re-organization taking place in the dye and pigment industry globally. This is due to the supply chain disruptions caused to European companies by the effect of Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation in Europe and increased environmental standards in China. A short to medium term boom for the Indian dye and pigment industry is expected as Indian companies fill in shortages caused by Chinese plant shut downs. However, those focused on differentiated product offerings catering to niche applications will witness faster and more sustainable growth over the long run.

### Flavors & Fragrances Ingredients

Market size of F&F ingredients market in India is ~\$2.7Bn as of FY14 and represents a 30% share of the global market. It is expected to grow at ~12% over next 5 years, increasing its share to 40% of the global market. Currently 85% of the domestic production of F&F ingredients is exported, with exports demonstrating a double-digit growth of 11% during last 5 years. The growth in exports market is led by natural ingredients, supported by the strong raw material base and sourcing advantage in natural ingredients that India offers. For instance, in eight natural ingredients (including mint, ginger, chilly and pepper, spices, anise, fennel and coriander, lemongrass oil, nutmeg, mace and cardamom, eucalyptus oil), India is among the top 3 producers in the world. The shift towards naturals can be attributed to consumer awareness towards healthy foods and government regulations prohibiting the use of certain synthetic flavors in food

production. The global F&F houses have also been taking steps to strengthen their natural products portfolio either through acquisitions or setting up their own manufacturing facility in the country. For example, in 2014, Firmenich entered into a JV with Jasmine Concrete, a leader in Indian floral extracts specializing in the extraction of Indian flowers, such as jasmine and tuberose. Similarly, in 2014, Mane acquired Kancor, a Kerala based manufacturer of spice oleoresins. As natural products gain global appeal the opportunity starts getting more interesting for India's F&F ingredients market.

Apart from growth in exports, the following trends are likely to drive domestic growth:

- Increasing demand for processed food: India's processed food industry is currently worth ~\$45bn and is expected to grow at 11% CAGR for the next 5 years.
- Rural penetration of FMCG: Growth of aspirational products and penetration of rural retail sector is expected to drive future growth.
- Premiumization: As Indian consumers graduate from using basic products to higher end products, the quality and value of the ingredients used is expected to increase.

Large global players have now started looking eastwards to expand their market reach and India is an attractive destination for global F&F houses to cater to the large, growing Asia-Pacific market. The top 10 global F&F houses have their presence in the country with others looking to enter. Eight of the top ten have a manufacturing presence in India. There has been a strong interest amongst most global F&F houses to acquire or partner in India, especially amongst F&F blenders, and this space is likely to see significant partnerships and M&A activity.

India is expected to regain its tag of the fastest growing economy in 2018; With transitory GST and demonetization issues fading out, an expected revival in bank credit, improved corporate performance and increased consumption demand is expected to lead India's economic recovery in 2018

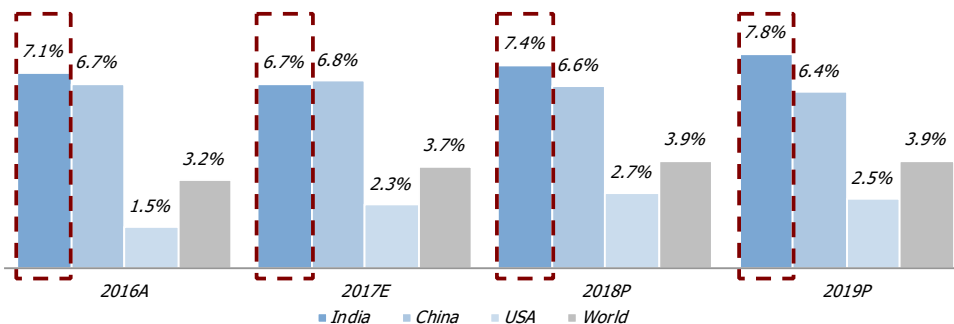
India is one of the very few countries currently enjoying a 'demographic dividend' due to a higher labour force when compared with a dependent population. By 2020, India is set to become the world's youngest country with ~55% of its population in the working age group

Structural reforms and persistent high economic growth has resulted in robust increase in FDI inflows in the last 3 years

According to PwC's 2018 Global CEO Survey, India overtook Japan to emerge as the 5th most attractive market for investments in 2018, after the U.S., China, Germany and the U.K.

## India: A Compelling Growth Story

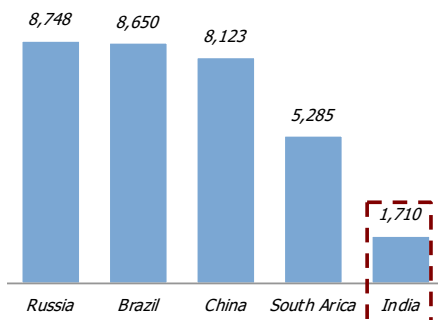
### India is Likely to be the Fastest Growing Economy in 2018



Source: IMF World Economic Outlook, January 2018

### Lowest GDP Per Capita Amongst BRICS

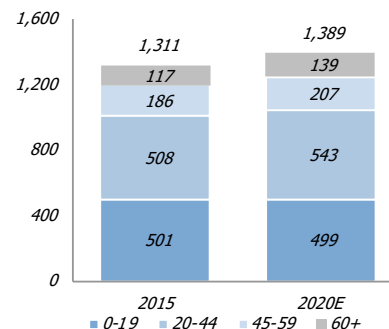
(US dollars)



Source: World Bank, December 2017; Data for 2016

### ~40% of the Population in Age Group 20-44

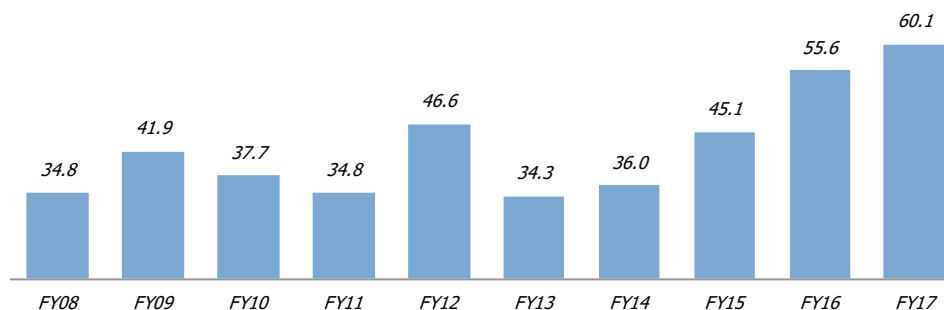
(people in millions)



Source: World Bank, 2016

### Significant Increase in FDI Inflows

(US dollars in billions)



Source: DIPP, September 2017. Numbers are provisional for FY15, FY16 and FY17

### Key drivers for inbound M&A:

- Ability to consolidate / establish a presence in India
- Low-cost manufacturing base
- Acquiring brands and distribution network

### Key drivers for outbound M&A:

- Technology access
- Enhance product portfolio
- Access to Fortune 500 clients

## Key Trends in Indian Chemicals M&A

Mergers & Acquisitions have been playing a critical role in shaping the Indian chemicals industry landscape in the past. Between 2010 and 2017, a total of 62 transactions have been concluded, with total deal valuation of \$4.5Bn spread across several chemicals sub-sectors.

Inbound M&A activity has been more prevalent, than outbound and domestic transactions, accounting for 44% of the transactions (based on deal count) from 2010-2017. A large number of foreign players have been increasingly interested either in establishing direct sales and marketing presence in India or acquiring a low-cost manufacturing base, resulting in significant inbound M&A activity. Several MNCs have been present in India for some time and are now focusing on inorganic strategies to capture the growing opportunity in this space. Few other MNCs have also recently entered India through inorganic route.

In a limited way, Indian companies are also engaging in M&A activities for expanding their product portfolio / market presence and more importantly to gain access to advanced global technologies. Some Indian companies (UPL, Kiri, Dorf Ketal, etc.) have acquired companies overseas to expand their footprint and acquire technology platforms. At the same time, there have been a number of domestic acquisitions by other Indian companies (Godrej, Astral, Zuari) to expand their product portfolios and also grow their India presence.

Within the chemicals spectrum, specialty chemicals companies have been at the forefront to use the acquisition route for growth. Specialty chemicals accounted for 53% of the total number of transactions in Chemicals between 2010 and 2017, followed by Agrochemicals / Fertilizers which accounted for 32%. The key reasons for the dominance of specialty chemicals activity is the emergence of several Indian specialty chemical companies of global scale and quality. Indian agrochemical players, with a low focus on R&D due to the high capital requirements, rely on strategic partnerships with the American, European, Japanese or Chinese agrochemical giants to add to their product portfolio. In turn, global agrochemical players have benefitted from leveraging the distribution network and sales infrastructure of the Indian partner.

The Indian chemicals sector is expected to witness heightened levels of M&A interest by players across the spectrum. The increased globalization of the sector, sustained market opportunities and the emergence of quality companies is expected to create an exciting period for chemicals in India.

## Case Studies for Inbound M&A Transactions



### Yara's Acquisition of Tata Chemicals' Urea Business

On August 10, 2016 Yara International acquired the urea business of Tata Chemicals for \$400mm on slump-sale basis. This translates to implied EV/LTM Revenue of 1.1x and EV/LTM EBITDA of 11.4x.

Urea business of Tata Chemicals includes Babrala urea plant and distribution business in Uttar Pradesh. The Babrala plant has an annual production of 0.7mm tonnes ammonia and 1.2mm tonnes urea. The urea business generated revenues and EBITDA of respectively \$350mm and \$35mm in the financial year ended 31 March, 2016.

"This acquisition represents another significant step in our growth strategy, creating an integrated position in the world's second-largest fertilizer market. India has strong population growth and increasing living standards, and significant potential to improve agricultural productivity. We are impressed with the world-class operations we have seen in Babrala. The workforce is committed to high HESQ standards, and has a solid safety track record. This well operated plant and its highly skilled employees will make an excellent addition to Yara's global production system."

– Svein Holsether  
President and CEO, Yara

CLARIANT



Vivimed

### Clariant's Acquisition of Vivimed Labs' Personal Care Chemicals Business

Clariant acquired Vivimed Labs' Personal Care Chemicals business for a cash consideration of \$57mm.

Vivimed's Personal Care Chemicals business includes active ingredients for use in hair care, skin care and home care products. The business caters to several marquee personal, home care and consumer companies, including L'Oréal, Unilever, P&G and Beiersdorf, among others. Through the divestiture, Vivimed wanted to reduce its net debt and focus on its API business.

The acquisition helped Clariant expand its manufacturing presence in India and enter new product categories in personal care ingredients

to enable cross-selling opportunities with its existing client base.

"The personal care industry in India offers us immense potential supported by the growing middle-class consumer population and the rising disposable income. This strategic decision will be a significant step towards strengthening our product portfolio and thereby reinforcing Clariant's long term commitment in the segment. We believe in the growth potential that India offers and are focused on expanding our footprint in the region."

– Dr. Deepak Parikh  
Region President – India, Middle East and Africa, Clariant

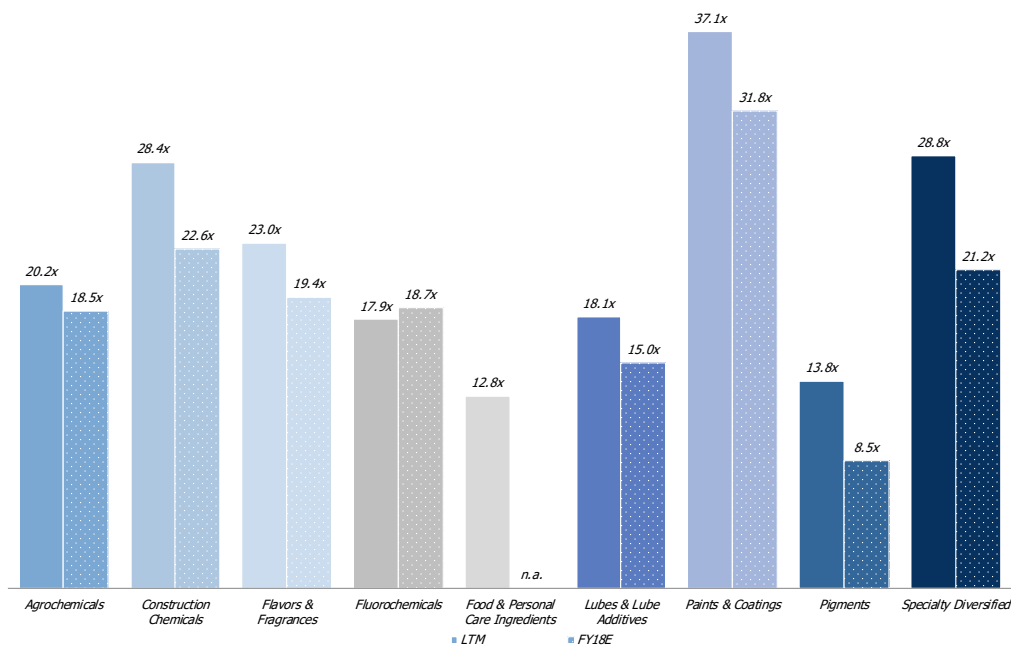
Lincoln advised Vivimed Labs in sale of its Personal Care Chemicals business to Clariant



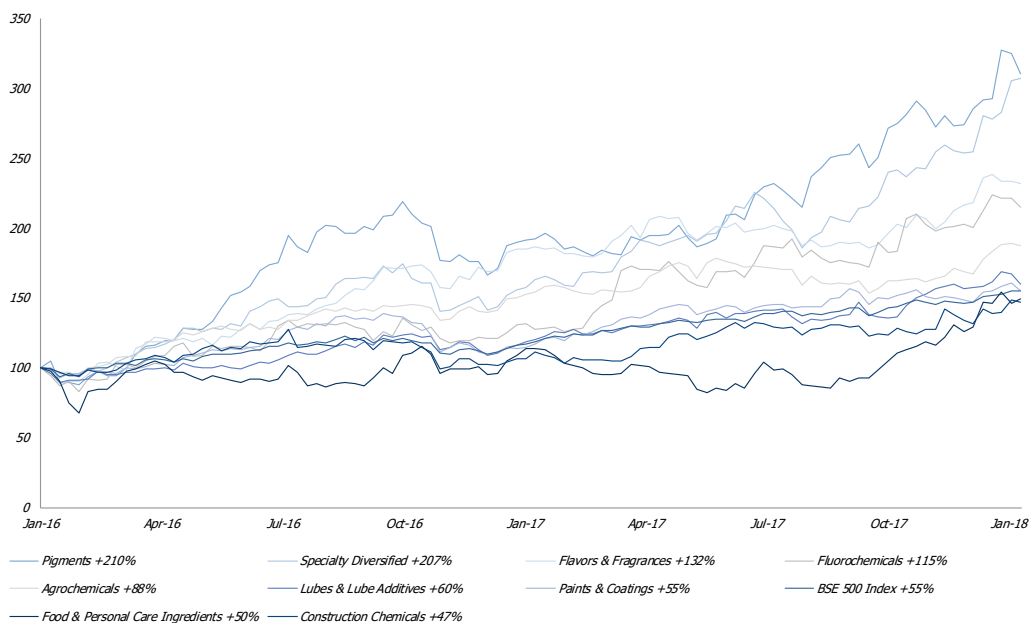


# Indian Chemicals Valuation and Equity Market Performance

## EV/EBITDA Comparison of Indian Chemicals Sub-Sectors



## Share Price Performance of Indian Chemicals Sub-Sectors



Source: Capital IQ as of January 18, 2018

## Indian Chemicals Trading Comparables

Company Name	Market Enterprise		EV / EBITDA		Revenue		EBITDA		EBITDA Margin		4-YR CAGR <sup>(1)</sup>	
	Cap	Value	LTM	FY18E	LTM	FY18E	LTM	FY18E	LTM	FY18E	Revenue	EBITDA
<b>Agrochemicals</b>												
UPL	\$6,352	\$7,069	13.0x	12.4x	\$2,565	\$2,824	\$546	\$572	21.3%	20.2%	15.4%	22.6%
Coromandel International	2,546	2,756	13.3x	14.1x	1,588	1,776	207	195	13.0%	11.0%	2.7%	2.7%
Bayer CropScience	2,463	2,451	38.7x	33.6x	432	485	63	73	14.7%	15.1%	0.8%	4.2%
PI Industries	2,138	2,123	24.9x	23.8x	351	387	85	89	24.2%	23.0%	18.6%	31.8%
Rallis India	811	796	18.7x	17.1x	264	302	43	47	16.1%	15.4%	3.6%	5.1%
Dhanuka Agritech	594	578	21.7x	19.9x	140	150	27	29	19.0%	19.3%	10.7%	19.8%
<b>Median</b>			<b>20.2x</b>	<b>18.5x</b>					<b>17.6%</b>	<b>17.3%</b>	<b>7.1%</b>	<b>12.5%</b>
<b>Construction Chemicals</b>												
Pidilite Industries	\$7,165	\$6,932	36.2x	33.4x	\$870	\$948	\$191	\$208	22.0%	21.9%	11.2%	20.6%
Chembond Chemicals	57	50	20.6x	11.8x	43	48	2	4	5.6%	8.8%	1.3%	(9.1%)
<b>Median</b>			<b>28.4x</b>	<b>22.6x</b>					<b>13.8%</b>	<b>15.3%</b>	<b>6.2%</b>	<b>5.7%</b>
<b>Flavors and Fragrances</b>												
Vinati Organics	\$790	\$770	24.2x	19.4x	\$108	\$120	\$32	\$40	29.5%	33.0%	4.8%	15.7%
S H Kelkar	663	668	26.8x	23.0x	155	164	25	29	16.1%	17.8%	10.2%	8.0%
Fairchem Speciality	256	302	21.8x	n.a.	127	35	14	n.a.	10.9%	n.a.	9.5%	9.1%
Camphor & Allied Products	104	120	14.5x	10.5x	54	79	8	11	15.2%	14.4%	12.9%	13.0%
<b>Median</b>			<b>23.0x</b>	<b>19.4x</b>					<b>15.6%</b>	<b>17.8%</b>	<b>9.8%</b>	<b>11.0%</b>
<b>Fluorochemicals</b>												
Gujarat Fluorochemicals	\$1,506	\$1,923	11.3x	n.a.	\$858	n.a.	\$171	n.a.	19.9%	n.a.	18.7%	1.3%
Navin Fluorine International	611	602	24.6x	18.7x	115	148	24	32	21.2%	21.8%	8.0%	13.1%
<b>Median</b>			<b>17.9x</b>	<b>18.7x</b>					<b>20.5%</b>	<b>21.8%</b>	<b>13.3%</b>	<b>7.2%</b>
<b>Food &amp; Personal Care Ingredients</b>												
Camlin Fine Sciences	\$242	\$303	nmf	n.a.	\$87	\$103	\$1.3	n.a.	1.5%	n.a.	8.8%	(4.3%)
Vishnu Chemicals	77	126	12.8x	n.a.	78	n.a.	10	n.a.	12.6%	n.a.	11.8%	2.9%
<b>Median</b>			<b>12.8x</b>	<b>n.a.</b>					<b>7.1%</b>	<b>n.a.</b>	<b>10.3%</b>	<b>(0.7%)</b>
<b>Lubes &amp; Lube Additives</b>												
Castrol India	\$2,885	\$2,781	18.7x	16.4x	\$522	\$590	\$149	\$170	28.5%	28.8%	2.1%	10.8%
Gulf Oil Lubricants	710	695	22.7x	19.5x	183	198	31	36	16.7%	18.0%	8.1%	18.2%
Tide Water Oil	385	366	17.6x	13.7x	174	184	21	27	12.0%	14.5%	5.8%	9.5%
Savita Oil Technologies	359	349	14.3x	12.0x	254	293	24	29	9.6%	9.9%	(7.0%)	1.5%
<b>Median</b>			<b>18.1x</b>	<b>15.0x</b>					<b>14.3%</b>	<b>16.3%</b>	<b>3.9%</b>	<b>10.1%</b>
<b>Paints &amp; Coatings</b>												
Asian Paints	\$17,841	\$17,695	39.1x	34.1x	\$2,438	\$2,709	\$453	\$518	18.6%	19.1%	8.5%	14.5%
Kansai Nerolac Paints	4,580	4,428	38.9x	33.2x	625	718	114	133	18.2%	18.6%	9.2%	21.8%
Berger Paints India	3,850	3,887	35.2x	30.3x	737	818	110	128	15.0%	15.7%	8.0%	17.5%
Akzo Nobel India	1,392	1,347	25.0x	24.2x	436	481	54	56	12.4%	11.6%	6.3%	16.2%
<b>Median</b>			<b>37.1x</b>	<b>31.8x</b>					<b>16.6%</b>	<b>17.1%</b>	<b>8.2%</b>	<b>16.9%</b>
<b>Pigments</b>												
Sudarshan Chemical	\$480	\$545	17.6x	n.a.	\$235	n.a.	\$31	n.a.	13.2%	n.a.	14.9%	26.2%
Meghmani Organics	423	512	10.0x	8.5x	242	285	51	61	21.2%	21.2%	7.7%	9.0%
DIC India	84	88	nmf	n.a.	110	n.a.	2	n.a.	1.8%	n.a.	(0.3%)	(0.1%)
<b>Median</b>			<b>13.8x</b>	<b>8.5x</b>					<b>13.2%</b>	<b>21.2%</b>	<b>7.7%</b>	<b>9.0%</b>
<b>Specialty Diversified</b>												
BASF India	\$1,486	\$1,600	28.8x	24.9x	\$821	\$882	\$55	\$64	6.8%	7.3%	6.6%	0.6%
Atul Ltd	1,363	1,387	17.4x	16.8x	437	509	80	83	18.2%	16.2%	8.5%	17.7%
Deepak Nitrite	579	676	31.0x	21.2x	210	248	22	32	10.4%	12.8%	7.5%	17.6%
<b>Median</b>			<b>28.8x</b>	<b>21.2x</b>					<b>10.4%</b>	<b>12.8%</b>	<b>7.5%</b>	<b>17.6%</b>
<b>Over all Median</b>			<b>21.7x</b>	<b>19.5x</b>					<b>15.6%</b>	<b>17.0%</b>	<b>8.1%</b>	<b>11.9%</b>

Source: Capital IQ as of January 18, 2018

(1) 4-YR CAGR from FY13 to FY17

## Global Industry Groups

Business Services  
Consumer  
Energy, Power & Infrastructure  
Healthcare  
Industrials  
Technology, Media & Telecom

## Global Locations

Amsterdam  
Beijing  
Chicago  
Dallas  
Frankfurt  
London  
Los Angeles  
Madrid  
Milan  
Moscow  
Mumbai  
Munich  
New York  
Paris  
San Francisco  
São Paulo  
Tokyo  
Vienna  
Zurich

## Advisory Services

Mergers & Acquisitions  
Debt Advisory  
JV & Partnering  
Valuations & Opinions  
Special Situations

# About Lincoln International

Lincoln International specializes in merger and acquisition advisory services, debt advisory services, private capital raising and restructuring advice on mid-market transactions. Lincoln International also provides fairness opinions, valuations and joint venture and partnering advisory services on a wide range of transaction sizes. With nineteen offices in the Americas, Asia and Europe, Lincoln International has strong local knowledge and contacts in key global economies. The firm provides clients with senior-level attention, in-depth industry expertise and integrated resources. By being focused and independent, Lincoln International serves its clients without conflicts of interest. More information about Lincoln International can be obtained at [www.lincolninternational.com](http://www.lincolninternational.com).

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