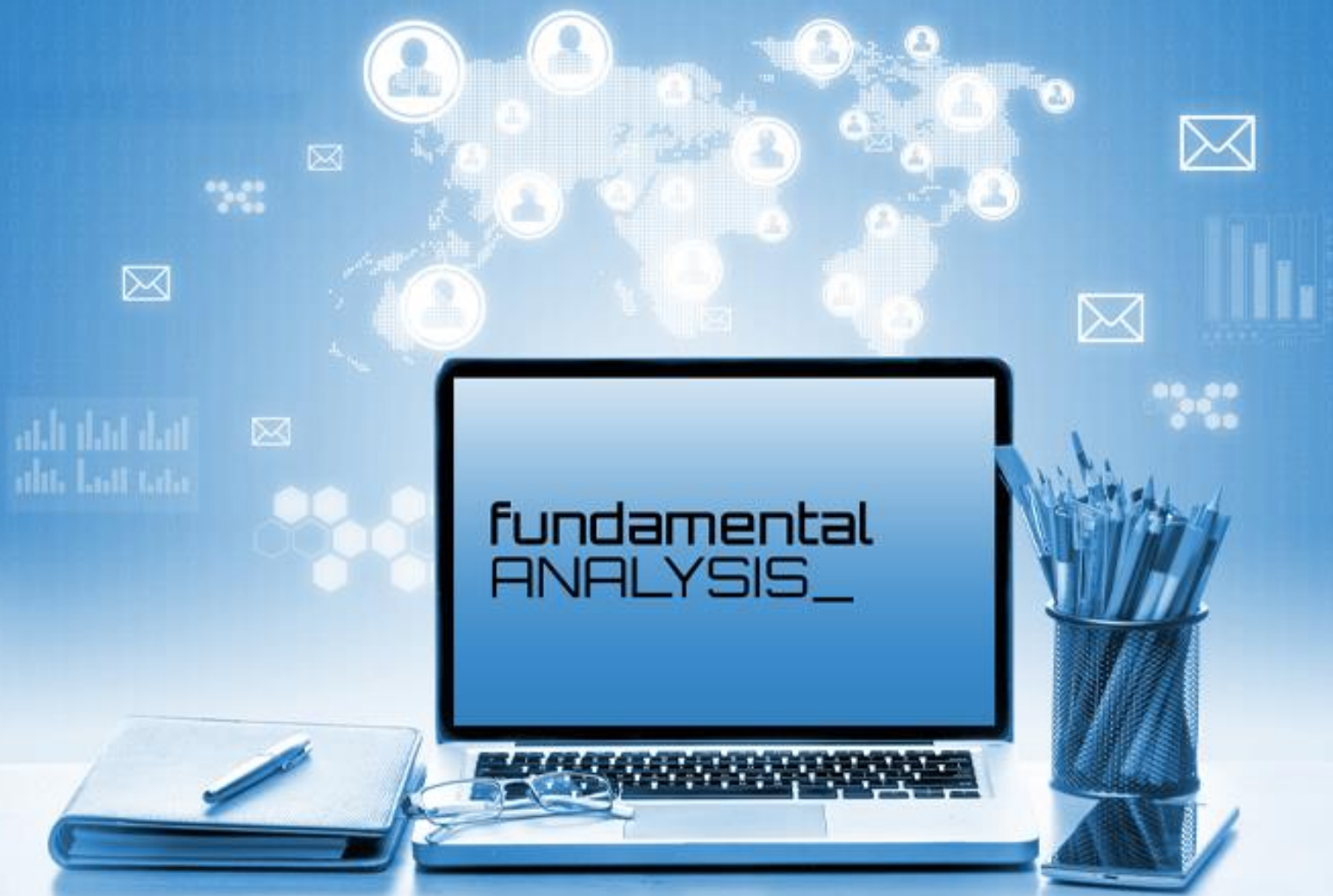


Stock Update

Jubilant Ingrevia Ltd.

Nov 9, 2022





Industry	LTP	Recommendation	Base Case Fair Value	Bull Case Fair Value	Time Horizon
Chemicals	Rs 535	Buy in the band of Rs 535-540 & add more on declines at Rs 477	Rs 586	Rs 633	2 quarters

HDFC Scrip Code	JUBLINGREAEQNR
BSE Code	543271
NSE Code	JUBLINGREA
Bloomberg	JUBLINGR IN
CMP Nov 07, 2022	535
Equity Capital (Rs cr)	15.92
Face Value (Rs)	1
Equity Share O/S (cr)	15.92
Market Cap (Rs cr)	8522
Book Value (Rs)	153
Avg. 52 Wk Volumes	933722
52 Week High	674
52 Week Low	402

Share holding Pattern % (Sep, 2022)	
Promoters	51.5
Institutions	11.6
Non Institutions	36.9
Total	100.0



**HDFCsec Retail research
stock rating meter**

for details about the ratings, refer at the end of the report

* Refer at the end for explanation on Risk Ratings

Fundamental Research Analyst

Kushal Rughani

kushal.rughani@hdfcsec.com

Our Take:

Jubilant Ingrevia is a leading global player of acetic anhydride, pyridine & its derivatives along with other products that cater to pharmaceuticals, agrochemicals, packaging etc. Company has presence across three segments Speciality Chemicals (28% of revenue), Nutrition and Health Solutions (16%) and Chemical Intermediates (56% of revenue), with strong backward integration and a leading market position. About 25% of Life Science Chemicals (Chemical Intermediates) volumes and 45% of pyridine and picolines (speciality chemicals) are consumed in house, leading to retaining of higher profit across the value chain. During FY22, the company derived about 53% of its revenue through exports and deemed exports and 47% from domestic market. Company has a diversified customer base with the top 10 customers accounting for ~25% of total revenue. Jubilant has 60+ products in pipeline across its business segment. It includes 36 in Speciality Chemicals, 24 in Nutrition & Health Solutions and 7 in Chemical Intermediates. Jubilant has 19% global market share in Vitamin B3 and 60% domestic share in Vitamin B4 market. In CDMO business, the company caters to large pool of 400+ clients globally and has a strong track record of building diversified scale and capacities across niche categories. The company is the lowest cost producer of Pyridine - Beta & all value-added products globally.

It has a diversified end-consumer base (pharma: 37%, Nutrition: 20%, Agro: 22%, Industrial: 18%). Company manufactures over 150 products and sells to 1,500 customers globally. Speciality Chemicals and Life Science Chemicals business tend to induce volatility in operating margin, given the cost-plus structure, however, the company has invested in niche segments like Diketene products, which would lower volatility and improve margins. Company has a strong research and development pipeline of over 60 molecules, which would ensure launch of new molecules over the next three-to-four years, aiding revenue growth. Jubilant has planned a capex outlay of around Rs 2050cr over FY22-25 and out of that Rs 850cr already incurred up to FY22. Company aspires to double its revenue by FY26 (from the base of FY21) led by scale up in the existing products and new products launches across its products segments. Management has guided for improving revenue mix of Specialty and Nutrition segments to 65% by FY27 from 46% in FY22 and this would be a key driver for overall margin improvement. It is steadily expanding its product portfolio by leveraging several business synergies. EBITDA contribution from higher value segments is expected to increase significantly over the next 3 years. We believe Jubilant Ingrevia is well placed to capitalize on long term growth opportunities on the back of (1) > 65 new products pipeline (2) strong traction in CDMO segment (3) import substitution (4) China+1 policy adopted by global clients.

On Sep 30, 2021, we had initiated coverage and recommended buy at Rs 726 and add more on declines at Rs 650 with base case target price of Rs 795 and bull case target of Rs 844. After that the stock hit high of Rs 838 in Oct-2021 ([Link](#)).



Valuation & Recommendation:

Jubilant has announced capex outlay of Rs 2050cr over FY22-25E. Out of that Rs 1250cr is planned between FY23-25E. Specialty Chemicals has high entry barriers on account of extensive R&D focus and long gestation period before getting approvals from customers. Company had registered robust growth in revenue and profitability led by sharp uptick from Chemical Intermediates business. Company is likely to report lower margin and profitability during FY23 given high base effect in revenues and PAT in FY22 (Q1 to Q3). We expect 8.5% CAGR over FY22-FY24 in revenue led by double digit growth in Speciality Chemicals business. Management has guided for strong growth in H2FY23 along with margin improvement. The fluctuations in the margin would depend on the prices of key inputs and outputs given the cost-plus structure, particularly in the Chemical Intermediates segment. Strong demand environment, healthy market share in key products, strong capex programme in the medium term and new additions of products, healthy B/S, and China+1 policy adopted by the companies worldwide are some of the key positives for the company. We feel investors can buy the stock in the band of Rs 535-540 and add more on declines to Rs 477 for base case target of Rs 586 (18.5x FY24E EPS) and bull case target of Rs 633 (20x FY24E EPS) over the next two quarters.

Financial Summary

Particulars (Rs cr)	Q2FY23	Q2FY22	YoY (%)	Q1FY23	QoQ (%)	FY20	FY21	FY22	FY23E	FY24E
Total Revenues	1304	1223	6.6	1166	11.8	3,179	3,491	4,949	5,197	5,831
EBITDA	153	195	-21.7	141	8.5	400	612	832	701	869
Depreciation	31	31	1.6	31	-1.3	122	125	123	143	171
Other Income	7	7	4.3	10	-27.0	10	15	32	30	37
Interest Cost	5	7	-29.2	4	24.4	88	71	31	27	35
Tax	40	54	-26.1	36	10.0	-23	102	232	162	194
APAT	84	111	-23.9	79	6.2	220	316	477	399	504
EPS (Rs)						13.8	19.8	30.0	25.3	31.7
RoE (%)						9.4	18.2	21.9	15.4	17.0
P/E (x)						38.7	27.0	17.9	21.3	16.9
EV/EBITDA (x)						22.5	14.7	10.8	12.9	10.4

(Source: Company, HDFC sec)

Q2FY23 result update

Revenue grew 6.6% YoY at Rs 1304cr. EBITDA margin slipped 430bps YoY at 11.7%. Net profit declined 24% YoY at Rs 84.3cr. Power & fuel expenses surged 76% YoY at Rs 188cr. EBITDA was impacted due to non-availability of contracted coal and lower volume offtake of Niacinamide.



Speciality chemicals revenue grew 63% YoY at Rs 480cr. EBITDA margin for the segment slipped 800bps YoY at 16%. It was on account of better demand across all products. Margin got impacted mainly on account of higher cost of energy due to restriction on contracted coal supplies.

Chemical Intermediates business continue to witness strong demand resulting in volume growth. Business continues to improve its leadership position in Acetic Anhydride in domestic and international market. Revenue impact on YoY basis was primarily driven by lower prices of feed stock leading to lower sales prices of Ethyl Acetate and Acetic Anhydride. Chemical Intermediates revenue was down 5% YoY at Rs 710cr. Volume grew 13% YoY. EBITDA margin was down 300bps YoY at 10.8%. EBITDA margin was lower due to stock impact on lower feed stock prices and Lower demand of Ethyl Acetate.

Nutrition and Health Solutions business reported 36% YoY declined at Rs 114cr. EBITDA margin slipped 750bps YoY at 12%. The business performance was impacted mainly due to impact of Bird & Swine Flu in EU & US region and overall excess inventory situation across the value chain, coupled with short term demand impact in Europe due to on-going geopolitical situation.

Company derived 60% of revenue from domestic market, 24% from Europe, US at 4% and 12% from RoW markets in the quarter.

Net debt increased by Rs 101cr as compared to March-2022. Gross debt stood at Rs 384cr and net debt at Rs 282cr as on Sep-2022. Management said that the company has developed strong product pipeline using in-house R&D, technical expertise into various chemistry platforms and long-standing relationship with global Pharmaceutical & Agrochemical customers including Innovators.

Company said that H2 FY23 performance is likely to be better than H1, assuming no unexpected adverse situation.

It has guided for improving revenue mix of Specialty and Nutrition segments to 65% by FY27 from 46% in FY22 and this would be a key driver for overall margin improvement.

Conference call highlights

Speciality Chemicals revenue grew 63% YoY driven by volume growth across product segments. Nutrition and Health Solutions business continued to witness lower demand owing to post flu impact and excess inventory situation across the value chain, coupled with short term demand impact in Europe due to on-going geo-political situation. Chemical Intermediates volume increased while revenue was lower, mainly impacted on account of lower prices of key RM i.e. Acetic Acid. Higher input cost due to non-availability of contracted Coal, coupled with lower volumes offtake of Vitamin B3 has impacted EBITDA, though Specialty Chemical and Chemical Intermediate volumes have grown significantly



Speciality Chemicals

- Share of revenue to customers having Agro Chemical end use increased during the quarter. Company also witnessed healthy demand for Oil field chemicals.
- CDMO pipeline is healthy and progressing positively. New GMP and non-GMP facilities which are expected to be ready during Q3FY23 will help in catering growing demand of CDMO projects. CDMO pipeline is very healthy and progressing well. Currently, the company is fully utilizing its CDMO capacity.
- As on Mar-2022, the company had five molecules in pharmaceutical CDMO pipeline out of which three in Phase III for antiretroviral, anti-cancer and anti-diabetic applications and two in Phase II for anti-cancer and anti-thrombotic applications. Agrochemicals CDMO included two molecules. As on H1 FY23, this count stands at 7 in pharmaceuticals and 3 in agrochemicals. Management said that 10-12 products are under development stage in pharmaceuticals and 3-4 products under development in agrochemicals segment.
- Positive traction of demand for other specialty chemicals also from both domestic as well as international customers.
- Proposed investment in specialty chemicals is around Rs 675cr. The proposed investment is for expansion of - Diketene derivatives, agrochemical intermediates, and new green field GMP plant for CDMO and also proposed to be invested in new plants for foraying into fluorination derivatives and agro actives (fungicides).

Nutrition & Health Solutions

- Nutritional Business revenue declined 36%, on account of lower demand owing to post flu impact and excess inventory situation across the value chain, coupled with short term demand impact in Europe due to on-going geo-political situation. Animal nutrition business has improved market share of Vitamin B4 and other Branded Premix products. Share of Food and Cosmetic in segment revenue grew YoY.
- Proposed investment of Rs 200cr for set up of GMP complaint plant for pharma grade vitamin B3, and plants for enhancing portfolio of animal & human nutrition products.
- Focus on adding newer customer and products. Demand coming in from domestic players

Chemical Intermediates

- Chemical intermediate business continues to witness strong demand resulting in volume growth. Revenue impacted mainly on account of lower prices of Key raw material, that is acetic acid. It continues to improve leadership position in Acetic Anhydride in domestic and international market. Acetic anhydride witnessed double-digit volume growth YoY basis. Revenue from Europe have gone up significantly YoY basis. EBITDA was lower due to stock impact on lower feed stock prices, and lower demand of ethyl acetate. The company continues to maintain domestic market leadership for acetic anhydride and have further strengthened



position in international market. The company remains the key strategic supplier for select customers of ethyl acetate. Upcoming acetic anhydride plant at Bharuch is under construction and is expected to be ready during Q4FY23.

- Volumes have grown while revenue is impacted mainly due to lower prices of key RM i.e. Acetic Acid.
- It continues to witness strong demand resulting into robust volume growth.
- Acetic Anhydride volumes grew by 22% on YoY basis. Normalized market situation. Acetic acid prices are now stabilizing.
- Revenue from Europe & Japan have gone up significantly on YoY basis.
- Segment has witnessed normalized market situation as well as lower Acetic Acid prices, which is also reflecting into both revenue as well as EBITDA.
- Company continues to maintain domestic market leadership for Acetic Anhydride and remained the key supplier of Ethyl Acetate.
- Market share in Europe has improved significantly and is continuing to grow.
- Company is witnessing good traction of demand for the new product i.e. Propionic Anhydride.
- Proposed investment of Rs 275cr for set up of a grain based green specialty ethanol plant & other de-bottlenecking.

Other key highlights

- Management expects H2FY23 performance to be better than H1 assuming no unexpected adverse situation It expects overall healthy revenue growth during FY23, led by volume growth in Speciality Chemicals and Chemical intermediate segments. Commissioning of new Capex during H2 will aid future growth. Focus is on improving revenue mix of Specialty and Nutrition segment to 65% by FY27 from 46% in FY22 and believe this to be a key driver for overall margin improvement.
- Commissioning of three new capex of CDMO GMP, CDMO non-GMP and acetic anhydride is likely to aid the revenue growth.
- In the Nutrition & Health Solution segment Niacinamide demand is expected to start normalizing in the later part of the current quarter.
- EBITDA of subsequent quarters of FY23 to improve, assuming no unexpected adverse situation.
- Company has ongoing growth capex plan of Rs 2050cr during FY22-25 period.
- EBITDA impacted due to non-availability of contracted coal and lower volume offtake of Niacinamide. Company said that it has passed on partial increase in RM and energy costs. It is strategizing towards improving the revenue mix of specialty and nutrition segments to 65% by FY26 from 46% in FY22 and Jubilant believes this to be a key driver for overall margin improvements.
- CDMO GMP multipurpose plant for pharma intermediates to be commercialized by Q3FY23.
- CDMO Non GMP – two multipurpose plant for pharma & agro intermediates to be commercialized by Q3FY23.
- MPP agro active plant for moving up the value chain of crop protection actives & growing customer demand to be commercialized by Q3FY24.
- Diketene phase 1 is already commissioned.



- Acetic anhydride capacity expansion to cater growing demand & geographic expansion to be commercialized by Q4FY23.
- Upcoming acetic anhydride plant at Bharuch is under construction and is going as per schedule.
- Food grade acetic acid is already commissioned.
- Company expects peak revenue of Rs 1900cr from an investment of Rs 900cr.

Healthy business outlook and vertically integrated operations

Jubilant Ingrevia has an established market position across business segments, with portfolio of more than 150 products. In the Specialty Chemicals business, the company is globally the lowest cost producer of pyridine-based derivative products, among the top two in pyridine and the leader in 14 pyridine derivatives. In the Nutrition business, Jubilant ranks among the top two manufacturers of vitamin B3 globally and among India's largest in vitamin B4 (choline chloride) manufacturing. The company is one of the top two players in the acetic anhydride market globally and the leading producer of ethyl acetate. Furthermore, a healthy pipeline of over 60 new products will help sustain market position across business segments over the medium term.

Its vertically integrated operations across the value chain leads to cost competitiveness. About 45% of the Chemical Intermediates segment volume was consumed by the SC segment and ~50% of the pyridine and picolines output of the Specialty Chemicals segment was used in the Nutrition segment in FY22.

Jubilant has strong business model on the back of i) long gestation in Specialty Chemicals (around 3 years for product approvals and facility audits), (2) expertise in handling multi-step chemistries at commercial scale (3) large capex programme to expand product portfolio and markets and iv) entry into import substitute Diketene business.

In FY22, Revenue grew by 42% YoY in FY22, driven by strong growth in the chemical intermediates (CI) segment, backed by favourable market conditions and commercialisation of capital expenditure. Operating margin remained healthy at 16.8% (17.6% in FY21) driven by a one-off gain in the CI segment given the favourable pricing environment for key products. Speciality chemicals (SC) and nutrition and health solutions (NHS) segments continued to grow steadily.

Diversified business across verticals

Jubilant Ingrevia is a leading global niche player offering innovative and cost-efficient products/solutions to pharma, agrochemicals, nutrition and consumer industries, primarily based on pyridine and pyridine-based derivatives. It boasts lowest-cost manufacturing in pyridine globally, a significant long-term moat that underpins its global leadership in many pyridine-based value-added products. Jubilant's presence across the product value chain helps it reduce volatility in prices of raw materials/intermediate and thus protects its margins.



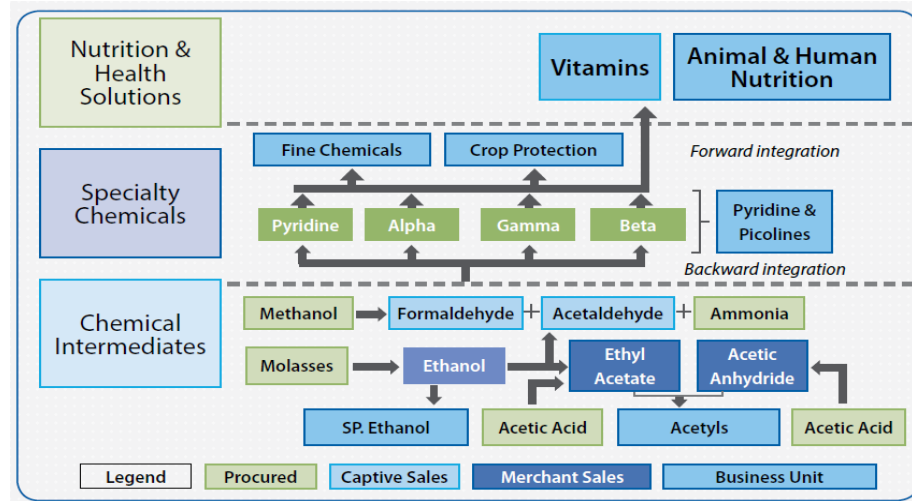
Pyridine is used in base chemicals / intermediates for multiple user industries such as pharma (APIs), agrochemicals (herbicides, insecticides, fungicides), cosmetics, animal nutrition, plastic polymers, print & packaging, and solvents. Pharma (49% of end-user industry) and agrochemicals (29%) are the largest consumers of pyridine-based derivatives.

Company derived 28% from the high-margin Specialty Chemicals segment, 16% from the NHS segment and the remaining 56% from Chemical Intermediates segment. Company derived 47% of revenue from domestic market while 53% of revenue from international markets in FY22. The company has a wide reach in the markets of North America and Europe. Company has 1,400+ clients globally, with the top 10 customers accounting for 20-25% of overall revenue.

Company serves diverse end-user industries, such as pharmaceuticals (accounted for 37% of the revenue in FY22), agrochemicals (22%), nutrition (20%), and industrial segments such as paints, packaging and solvents (18%). This insulates the company from downturn in any particular industry. Revenue grew 42% year-on-year in fiscal 2022, driven by strong growth in the CI segment, backed by favourable pricing scenario for key products, acetic anhydride and ethyl acetate.

Business and Products Details

	Speciality Chemicals	Nutrition & Health Solutions	Chemical Intermediates
Revenue & EBITDA contribution	28% of revenue and 35% of EBITDA	15% of revenue and 18% of EBITDA	56% of revenue and 47% of EBITDA
Subsegment	Pyridines & Picolines, Fine chemicals, Crop protection and CDMO	Nutrition and health ingredients, Fine chemicals, Crop protection chemicals, CDMO	Acetyls, Specialty Ethanol
Products	70 products which includes Pyridines & Picolines, Cynapyridines, Aminopyridines and Diketene derivatives	48 products including 5 nutrition ingredients and 18+ branded solutions (for animal health)	9 products including Acetic Anhydride, Ethyl Acetate, Propionic Anhydride, Green Acetic Acid, Green Acetaldehyde, Formaldehyde, Specialty Ethanol and Anhydrous Alcohol
Applications	Pharma, Agrochem, Nutrition, Paints, Food, Oil field chemicals, Electronics etc.	Animal nutrition (poultry, dairy, aqua), Hair care, Cosmetics, Energy drinks, Breakfast cereals, Nutraceuticals, Weight Supplements	Pharmaceutical (Paracetamol and other APIs), Agro (Acephate, Clethodium), Food & Nutrition
Key RM	Formaldehyde, Acetaldehyde, Ammonia	Beta Picoline	Acetic acid and Ethanol



Large capital outlay towards Speciality Chemicals

Key investments include Diketene Derivatives (forward integration of Ketene capability) investment is in two phases with phase 1 commercialised in Q4FY22 and phase 2, to commence in H2FY24. It launched diketene and 2 derivatives (building blocks) and plans to launch 15 more derivatives over next 3 years.

GMP and Non-GMP multi-product facility (MPP) for CDMO Pharma and Crop Protection customers - Both facilities to be commissioned by Q3FY23. Company expects commercialisation of 7 molecules (5 in pharma and 2 in agrochemicals) in the medium term. Multi Purpose Plants (MPP's) for insecticides, fungicides and herbicides to commence by Q3FY24 as it moves up the value chain for agro actives and advanced intermediates to enable enhancing market share with global customers (de-risking their supply chains).

Speciality Chemicals capex outlay is the highest among its three segments (~Rs 1300cr/ Rs 2050cr), whereby various capacity expansions are committed for Fine Chemicals, Crop Protection and CDMO on rising demand in end applications coupled with 36 new products in pipeline. A strong underlying global demand environment in agrochemicals and pharmaceuticals in addition to China+1 tailwinds (as global supply chains get de-risked) and better future prospects of CDMO business would drive growth from FY24E onwards.



Project	Segment	Expected Commissioning	Rationale
Diketene (phase I)	Speciality Chemicals	Q4 FY22 (commissioned)	Moving up the value chain of Ketene, strong demand
Food grade Acetic acid	Chemical Intermediates	Q1 FY23 (commissioned)	Green Acetic acid for food applications
CDMO (GMP) Multi-Purpose Plant (MPP)	Speciality Chemicals	Q3 FY23	For pharma intermediates
CDMO (Non-GMP) Multi-Purpose Plant	Speciality Chemicals	Q3 FY23	For pharma & agro intermediates
Acetic Anhydride capacity expansion	Chemical Intermediates	Q4 FY23	Strong demand and geographic expansion
MPP Agro Active Plant	Speciality Chemicals	Q3 FY24	Moving up the value chain of Crop protection and growing customer demand
Diketene (phase II)	Speciality Chemicals	Q3 FY24	Moving up the value chain of Ketene, strong demand
Niacinamide capacity expansion	Nutrition & Health	Q3 FY24	Geographic expansion and value added end uses

Specialty Chemicals

Specialty Chemicals vertical comprises of four subsegments.

Pyridine & Picolines: Within the business segment, this business is the flagship as the products are building blocks for Crop Protection Chemicals, Fine Chemicals and Nutritional products. More than 50% of output is consumed inhouse for further value-addition.

Fine Chemicals: These include Pyridine, Picoline based valued added products that primarily find application in Pharmaceuticals (Active Pharmaceutical Ingredients), Personal Care and Electronics. It has also launched phase-1 of Diketene Derivatives under the same business.

Crop Protection Chemicals: This primarily comprises of Agro Intermediates and Agro Actives consisting of Insecticides, Herbicides & Fungicides. Agro actives have been introduced as a part of long-term growth strategy based on complete backward integration of Pyridine, Picoline and Diketene derivatives. Company is offering Microbial Control Solution which comprises of range of safe and highly efficacious Biocides for application in paints, coatings, industrial, cosmetic and personal care industries.

Custom Development & Manufacturing Organisation (CDMO): Company leveraged expertise in almost 35 key technology platforms and experience of 40 years, to position itself as a reliable CDMO partner for global Pharmaceutical and Agrochemical companies.



Pyridine

Industry applications of Pyridine started ~150 years ago as a solvent in pharmaceuticals, chemicals and adhesives. Surge in demand for Pyridine & its derivatives as a key ingredient, specifically from the agricultural and pharmaceutical sectors, has been one of the key factors that helped drive the pyridine market in terms of value and volume sales. Key drivers for Pyridine volume growth in the coming decade are the growth of the Global Agrochemical market, Nutrition market & CDMO opportunities in Pyridine-based products. The global agrochemicals market is expected to grow at a CAGR of 4% from FY21-26. The demand is expected to be propelled by Asian & Latin American nations due to already high per capita fertiliser usage in developed economies. The Indian agrochemical market is expected to grow at 8% over FY21-26. Another emerging trend is the growth of 'Fluorine derivatives' for agrochemical application. Over FY21-28, agrochemicals molecule patents worth ~US\$ 6 billion are likely to expire, of which ~51% share is the fluorine-containing molecules. This is expected to be a long-term agrochemical opportunity for companies with fluorination capability.

Pyridine and its derivatives are used in almost all therapeutic drug categories (antiviral, oncology, antibiotic, anti-inflammatory etc.). CDMO opportunity is a potential growth prospect due to the development of new active ingredients by innovators and their shift in focus to core competencies and outsourcing the production to low-cost manufacturing destinations. Custom synthesis is also a potential opportunity for agrochemical technical development.

The nutrition segment is expected to have maximum Pyridine volume growth due to increased intake of vitamins & minerals in the form of feed supplements & additives (for animals) & nutraceuticals (for humans). The drivers such as consumer & industrial chemicals industry are expected to have low to moderate pyridine consumption growth due to niche applications and overall low share of the Pyridine value chain in these industries.

CDMO business

Contract Development and Manufacturing (CDMO) is a high-margin business. CDMO partners generally make intermediates that go into the making of the molecule. The molecule takes about 7-10 years for approval. Till then the revenue for the CDMO player is restricted to the trial batches supplied. It provides long-term revenue visibility for the players. The material has to be sourced from the CDMO player for the length of the patent life (which could be 7-10 years or even more).

Jubilant invested in the Diketene Derivatives plant for the launch of six derivatives and further eight value added products. Two derivatives have been launched in the last quarter of FY22. To move up the value chain to synthesize agro-actives, the company has invested in a manufacturing facility for Insecticides, Fungicides and Herbicides which will be introduced in the coming year. Company expects volume-led growth in the medium term propelled by the commissioning of new capex of CDMO GMP and CDMO non-GMP facilities.



Jubilant developed and commercialised 10 new products – two in CDMO and the rest in Pyridine & Picolines, Fine Chemicals and Crop Protection Chemicals. It had five molecules in pharmaceutical CDMO pipeline out of which three are in Phase III for antiretroviral, anti-cancer and anti-diabetic applications and two are in Phase II for anti-cancer and anti-thrombotic applications. Agrochemical CDMO pipeline includes two molecules.

CDMO services ranges from Process R&D to Commercial Manufacturing and caters to global pharma and agro customers given its strong synthetic, organic chemistry and manufacturing capabilities (17+ collaborations on late-phase and launch products with pharma and biotech companies).

Current pipeline includes (1) 5 molecules in pharma CDMO of which 3 in Phase III for anti-retroviral, anti-cancer and anti-diabetic applications and 2 in Phase II for anti-cancer and anti-thrombotic applications (2) 3 molecules in agrochemical CDMO of which all are in Stage IV for insecticides/ fungicides.

Jubilant announced a 3-year contract worth Rs 270cr with a global innovator, to whom it will supply two key GMP intermediates for one of its patented drugs. Both these products involve 7-steps chemistry with commercial supplies starting in FY23. International customer is among the top 10 leading innovator pharmaceutical companies globally. Through the contract, we will supply two key GMP intermediates for one 'patented drug' of the innovator pharmaceutical customer.

The agrochemical pipeline includes 13 compounds covering Fungicides, Insecticides and Herbicides. It has taken validation batches towards the filing of DMF for one of the intermediates for regulated markets from GMP facility at Bharuch. Another product validation is in the pipeline for FY23.

Diketene derivatives

Strong presence in ketene chemistry, now forward integrated into diketene derivatives: Jubilant Ingrevia has presence in ketene chemistry for long (acetic anhydride) and has now forward integrated into diketene derivatives to tap into ~45% of the domestic market demand, which is currently met via imports. Laxmi Organic is the only other diketene derivatives manufacturer (around 55% market share). Its proven ability to handle large ketene volumes provides confidence of it being able to fast scale up its newly commissioned plant. Ketene is extremely flammable, reacts violently with water, alcohols, ammonia, readily polymerizes and cannot be shipped or stored, plus mixture with air is explosive.



Nutrition & Health Solutions segment

Nutrition business contributed 16% to revenue and comprises of (1) Nutrition & Health Ingredients (2) Animal Nutrition & Health Solutions and (3) Human Nutrition & Health Solutions.

Vitamin B3 is a key product in Nutrition & Health Ingredients, and among eight B-complex vitamins, significant in multiple physiological functions. It is used in animal feed (increases nutrient absorption, thereby weight gain and better feed utilization), human nutrition (food premixes, dietary supplements, flour and rice fortification, energy drinks), personal care (skin and hair care), technical (metal plating for uniform surfaces) and agrochemicals (insecticides).

Jubilant is amongst top 2 global manufacturers of Vitamin B3 (Niacinamide & Niacin) with ~20% market share. Vitamin B3's global market is ~60,000 mtpa with major application in animal feed (~60%), human food (~25%) and cosmetics & others (~15%). Export to regulated markets contributed > 50% of revenue, thereby providing sustainability. Vitamin B4 is a major feed supplement in Poultry, Dairy, Swine and Aqua and it is a domestic leader in Vitamin B4.

Complete backward integration across product chain of Niacinamide is a key advantage. It has 100% in-house sourcing of Beta Picoline (key raw material) from specialty chemicals (manufacturing vitamin B3 via green route).

In Animal Nutrition & Health Solutions, Jubilant has 5 nutrition ingredients and 18+ branded solutions (animal health) and 18 new products pipeline over next 3-4 years. Company is expected to leverage healthy growth in nutrition business to diversify from animal feed nutrition and move towards higher value added areas i.e. pharma and cosmetic-grade vitamins.

Chemical Intermediates

Acetic Anhydride

This product is used in multiple applications across all key life sciences sectors. Owing to its versatility, the demand for Acetic Anhydride continues to remain strong at the global level and in India. Company is amongst the top two global merchant market suppliers of this product and are the largest supplier in India. Company caters to pharmaceutical APIs (Paracetamol, Ibuprofen, Aspirin, Prazoles, etc.), agrochemicals, vitamins, speciality polymers, food ingredients, aromatics, dyes and other industrial uses. On the back of global distribution network in Europe and the US, the company remains a preferred partner for leading global majors. Acetic Anhydride Expansion at Bharuch is progressing well as per plan. Company is likely to commission this unit towards the end of FY23. The commissioning of this expansion will make the company to the No. 1 position in the merchant market globally. Industrial applications accounted for almost 74% of the total market, this is followed by the pharmaceutical market which accounts for almost 13% of the



market. The growth of Acetic Anhydride globally is supported by healthy demand in the industrial segment and specifically in India is supported by the growth in the pharmaceutical segment.

New generation applications like artificial sweetener, wood acetylation, modified starch, polyimide films and industry innovations in pharmaceutical & agrochemicals are expected to steer the demand sharply up in the coming decade. The fact that there are no close substitutes to acetic anhydride is a key determinant keeping its demand high for industrial and pharmaceutical applications. Acetic anhydride is a key raw material for medicines, such as aspirins, paracetamol, certain vitamins and hormones, cortisone, acetanilide, theophylline, acetylcholine hydrochloride, acetophenacetin and sulfonamides. With the increased awareness of climate change and higher purchasing power, consumers are willing to spend more on sustainable construction products like acetylated wood. Other potential growth drivers for Acetic Anhydride are nutrition, polymers/ plasticisers, food emulsifiers & consumer industry. These segments along with Pharmaceutical would account for ~2/3rd of consumption growth of Acetic Anhydride by FY26.

Ethyl Acetate

Ethyl Acetate is an environment-friendly solvent, which is used by the pharmaceutical, packaging, coatings and ink industries. Company is leader in India; and also have a significant global presence for this product. In terms of end-use application, this product is also dominated by industrial applications largely driven by the demand from paints & coatings, food packaging, pharmaceuticals, inks & printing and adhesives industries among others. Industrial applications account for ~72% of the total market followed by pharmaceuticals which account for almost 20% of the market. The growth of the Ethyl Acetate market is supported by strong demand in the packaging segment due to changes in consumer preferences and the paints and coatings segments led by infrastructure growth.

Acetaldehyde

Company is the world's largest producer of Bio-based Acetaldehyde, a product that is backward integrated into bio-Ethanol. This product is sold in domestic and overseas markets and finds applications in resins, pharma, flavours & fragrances, etc. In addition to being used as feedstock for Pyridine production. The capacity utilisation of unit has increased every year.

Green Acetic acid

Jubilant commissioned 25,000 TPA green Acetic Acid plant from Bio-based Acetaldehyde in Q1 FY23. The plant is designed to meet the highest standards of product certifications like FSSAI, ISO 22000, Kosher, Halal, FCC Codex, etc. It will cater to the increasing demand in the food preservative segment across the globe. This food-grade Acetic Acid is in high demand globally. It will provide a healthier option for food preservation requirements, as compared to the Acetic Acid produced through the petroleum route.



Formaldehyde: It is the simplest variant of the aldehydes family which is manufactured on a massive scale. It is used in large quantities for producing many chemical compounds such as Urea-formaldehyde resin, Phenol formaldehyde resin, Pentaerythritol, Pyridine & Picolines. Apart from being used as an input for producing Pyridine, the company supply Formaldehyde to many customers in north India.

Ethanol

This is an organic molecule with applications in medicine, fuel additives and solvents. Moreover, it is a chemical building block to important organic compounds such as acetic acid. Company manufactures at Gajraula and Nira facilities through the fermentation of sugar present in molasses. Company also caters to the requirements of the Ethanol Blending Programme of the Indian government. The global Ethanol market is estimated at US\$ 89.7 billion in the year 2022 and is projected to reach size of US\$ 112 billion by 2026, at 5% CAGR. A major factor fueling growth in the ethanol market is its rising prominence as a fuel or fuel additive in the automotive industry. Higher crude prices and increasing concern about greenhouse gases are expected to boost the demand for ethanol both in developed and developing countries over the next several years. Within India, the domestic Ethanol market is estimated at US\$ 2.6 billion in 2022 and projected to reach a size of US\$ 4.2 billion in 2025, growing at CAGR of 10.2%. Ethanol demand in India is growing on the back of increasing ethanol use primarily in fuel additives, and in other applications such as beverages.

Quarterly Revenue and EBITDA

Revenue (Rs cr)	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22	Q4 FY22	Q1 FY23	Q2 FY23
Speciality Chemicals	329	388	295	349	444	382	480
Nutrition	198	167	179	216	206	150	114
Chemical Intermediates	549	710	749	722	648	633	710

Segment EBITDA (Rs cr)	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22	Q4 FY22	Q1 FY23	Q2 FY23
Speciality Chemicals	69	84	71	76	81	64	77
Nutrition	43	27	35	53	50	19	14
Chemical Intermediates	105	184	103	100	30	76	76

Key Concerns

Exposure to fluctuations in input prices and government policies

The company commands global leadership in the segment and is amongst the top three global players in acetic anhydride merchant market. Supply-side disruption in China led to sharp surge in prices of acetic acid. The volatility in acetic acid prices poses a major risk to the company's overall earnings.



Fluctuations in the prices of acetic acid (key raw material for the CI segment) leads to volatility in operating margin. While input price is a pass-through, in case of any sharp increase or decrease in price, there could be some impact on the margin.

It also is an intensive user of fuel and power and any abnormal rise in their prices could impact its margins.

Operations are exposed to government policies given the widespread international presence. Jubilant Ingrevia faced anti-dumping duty for its pyridine exports to China in 2015. Since then, the company has entered other geographies, thereby de-risking pyridine exposure to China. Furthermore, in November 2019, China terminated the anti-dumping duty. However, any adverse impact of government policies on revenue and profitability will remain a key rating sensitivity factor.

Large capex programme

Company is undergoing Growth Capex plan of Rs. 2,050 Crore during FY22 to FY25 Period. Production capacity may not be aligned with market demand. Insufficient capacity threatens ability to meet demand and be competitive while excess capacity threatens ability to generate competitive profit margins. Any significant time or cost overrun while executing the expansion of greenfield/brownfield project could lead to deterioration in the financial performance. While depreciation costs could rise post commissioning of capex (interest rise will be minimal due to limited debt borrowed), the new project could take time to start generating revenues and profits.

Foreign exchange fluctuations and regulatory actions

Company is also exposed to foreign exchange fluctuations because it deals in commodities such as acetic acid and ethyl alcohol. However, given significant export sales, the company has a natural hedge. Chemical Intermediate business witnessed strong margin expansion in FY22, which has moderated in H1FY23. Any negative/positive surprise of operating margin would be key to its overall profitability.

Regulatory actions on products/raw materials by regulators across the globe including ADD, ban etc. could impact the operations of the company (e.g. Paraquat ban in Brazil and Thailand resulted in lower demand of Pyridine in Q4FY21 and early Q1FY22). China disruptions by way of debt issues, power cuts, pollution clampdown etc. can have impact on the availability and spread on products – favourable or unfavourable for the company.

Working capital-intensive operations

Operations remain working capital intensive, driven by high inventory levels, as the company maintains over two months of raw material and finished goods stock given its wide product portfolio. Deterioration in working capital cycle may put pressure on its balance sheet.

The company is a large player in a number of products globally. Hence any changes in demand globally can impact its revenue/margin sharply.

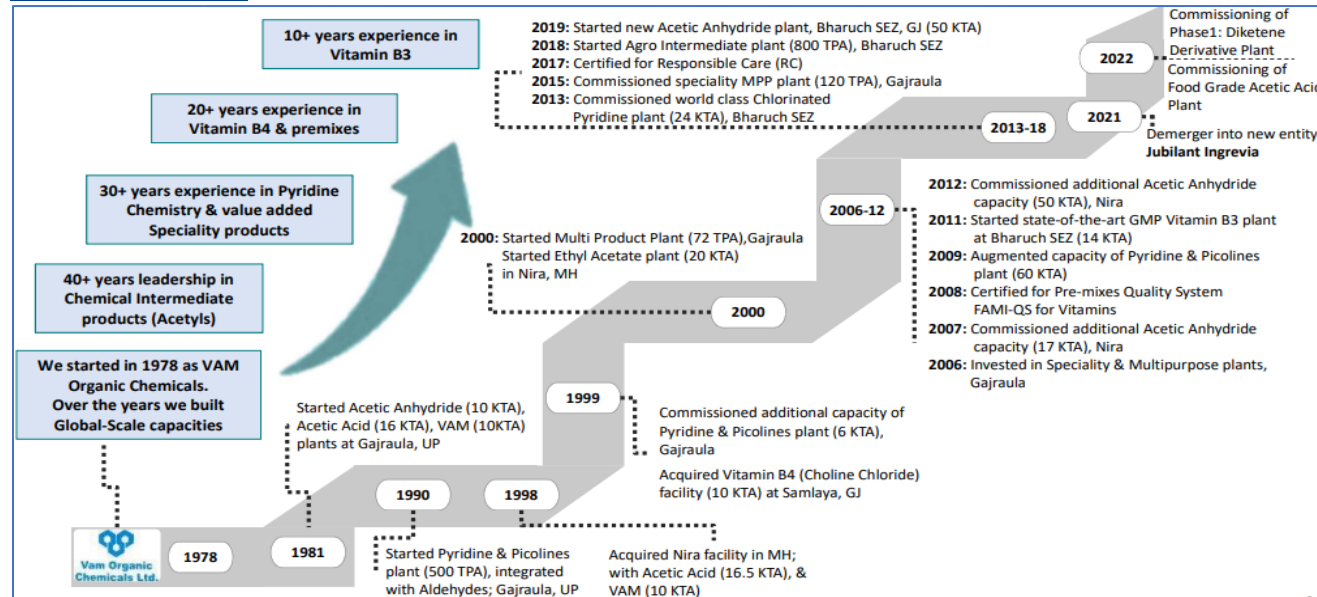


Company Background

Jubilant Ingrevia is a part of the Jubilant Bhartia Group, a diversified global conglomerate, founded by Mr. Shyam S. Bhartia and Mr. Hari S. Bhartia. The group has a strong presence in various sectors such as Pharmaceuticals, Contract Research and Development Services, Life Science Ingredients, Agri Products, Performance Polymers, Food Service (QSR), Food, Auto, Consulting in Aerospace and Oilfield Services. The group has four companies listed on the Exchanges - Jubilant Ingrevia, Jubilant Pharmova, Jubilant FoodWorks and Jubilant Industries. Company is one stop shop for Custom Development and Manufacturing (CDMO) solutions for Pharmaceutical and Agro-industry from process development and clinical phase to commercial manufacturing.

Ingrevia is born out of a union of 'Ingredients' and 'Life' ('Vie' in French). Jubilant Ingrevia is a global integrated Life Science products and Innovative Solutions provider serving, Pharmaceutical, Agrochemical, Nutrition, Consumer and Industrial customers with customised products and solutions that are innovative, cost effective and conforming to excellent quality standards. Jubilant has five manufacturing facilities across India and a diversified end-consumer base (pharma: 37%, Nutrition: 20%, Agro: 22%, Industrial: 18%). Company manufactures over 150 products and sells to 1,500 customers globally. Company derived 57% of revenue from domestic market which includes deemed exports, 21% from Europe, 10% from RoW and 5% from US. Company has planned capital expenditure of around Rs 2000cr in the next 3-4 years, which would drive growth from FY24E onwards.

Company Journey





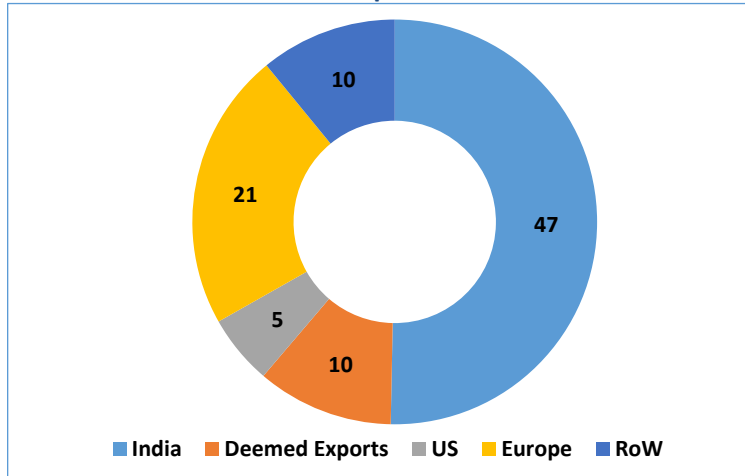
Growth Capex Investment Plan (Already committed & to be committed)

<p>Committed till date ~ Rs. 900 Crores (From FY'22 to Q2'FY23, Total Cash Outflow ~ Rs. 422 Cr.)</p>	<p>Additional Capex to be Committed during FY'23 & FY'24~ Rs. 1150 Crores Estimated Cash Outflow ~ (Rs. 363 Cr, Rs.650 Cr. & Rs.600 Cr. respectively in FY'23 – remaining year, FY'24 & FY'25) Intended to be funded through internal accruals</p>
<p># Expected Peak Revenue of Rs. 1900 Crores From Rs. 900 Crore Investment</p>	<p># Expected Peak Revenue of Rs. 2600 Crores From Rs. 1,150 Crore Investment</p>
<p>Speciality Chemicals</p> <ul style="list-style-type: none"> • CDMO (GMP) Multipurpose plant– For Pharma intermediates (Q3 FY'23) • CDMO (Non-GMP) Two Multipurpose plant for Pharma & Agro intermediates (Q3 FY'23) • MPP Agro Active plant – Moving up the value chain of Crop Protection actives & Growing customer demand (Q3 FY'24) <p>Note- Diketene Phase 1 is already commissioned</p>	<p>Speciality Chemicals Proposed Investment: Rs 675 Crores</p> <ul style="list-style-type: none"> • The above proposed Investment is for expansion of – Diketene Derivatives, Agrochemical Intermediates, and new green field GMP Plant for CDMO • Also proposed to be invested in new plants for foraying into Fluorination Derivatives and Agro Actives (Fungicides)
<p>Chemical Intermediates</p> <ul style="list-style-type: none"> • Acetic Anhydride capacity expansion – Growing demand & Geographic expansion (Q4 FY'23) <p>Note- Food Grade Acetic Acid is already commissioned</p>	<p>Nutrition & Health Solutions Proposed Investment: Rs 200 Crores</p> <ul style="list-style-type: none"> • The above proposed investment will be done to set up – GMP complaint Plant for Pharma Grade Vitamin B3, and Plants for enhancing portfolio of Animal & Human Nutrition products.
<p># : Expected Peak revenue on Prices prevailed at the end of FY22.</p>	<p>Chemical Intermediates Proposed Investment: Rs 275 Crores</p> <ul style="list-style-type: none"> • The above proposed investment will be done to set up a Grain based Green Specialty Ethanol Plant & Other De-Bottlenecking.

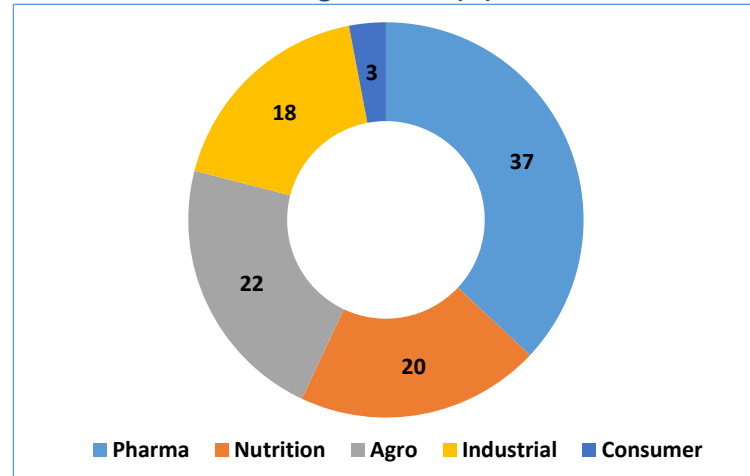


Jubilant Ingrevia Ltd.

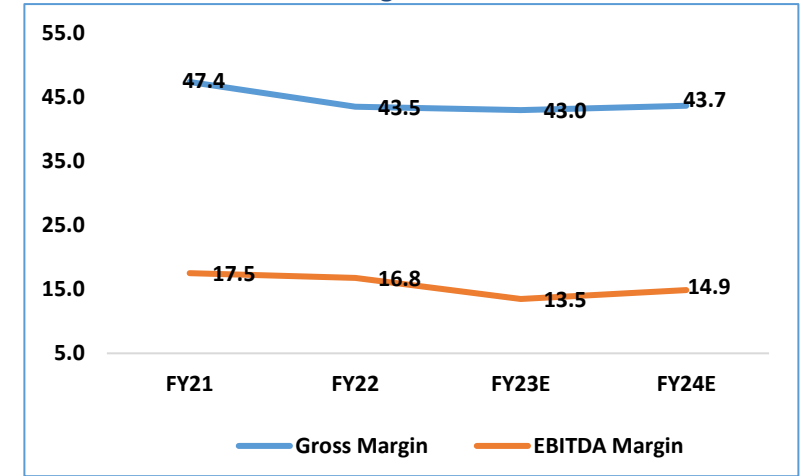
Revenue Split



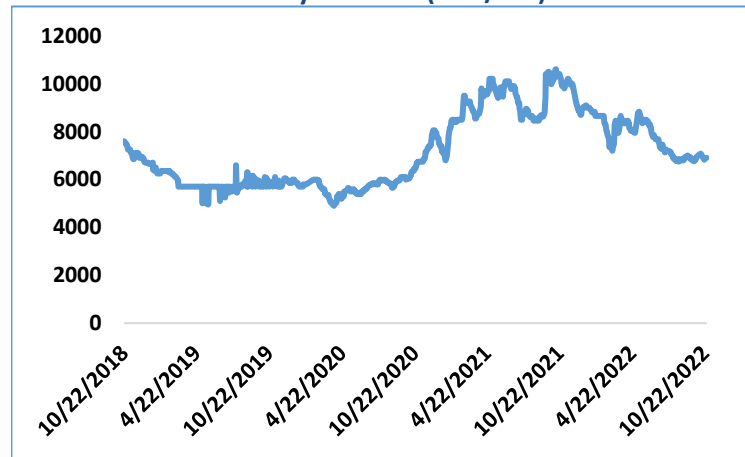
Segment mix (%)



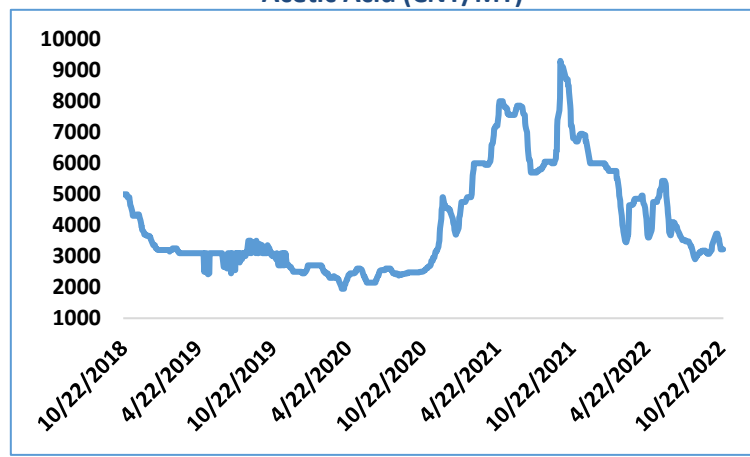
Margin Trend



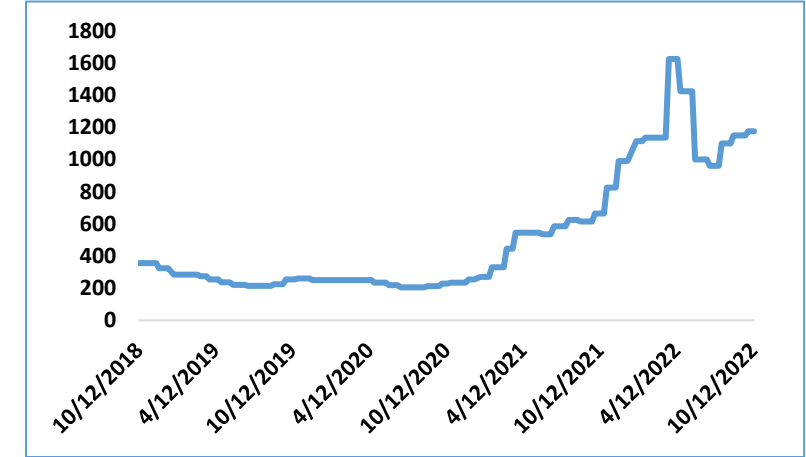
Ethyl Acetate (CNY/MT)



Acetic Acid (CNY/MT)



Ammonia (US\$/MT)





Financials

Income Statement

(Rs Cr)	FY21	FY22	FY23E	FY24E
Total Revenue	3491	4949	5197	5831
Growth (%)	9.8	41.8	5	12.2
Operating Expenses	2879	4117	4495	4962
EBITDA	612	832	701	869
Growth (%)	53	36	-15.7	23.9
EBITDA Margin (%)	17.5	16.8	13.5	14.9
Depreciation	125	123	143	171
EBIT	487	709	558	697
Other Income	15	32	30	37
Interest expenses	71	31	27	35
PBT	418	709	561	698
Tax	102	232	162	194
RPAT	316	477	399	504
Growth (%)	43.6	51	-16.3	26.3
EPS	19.8	30	25.1	31.7

Balance Sheet

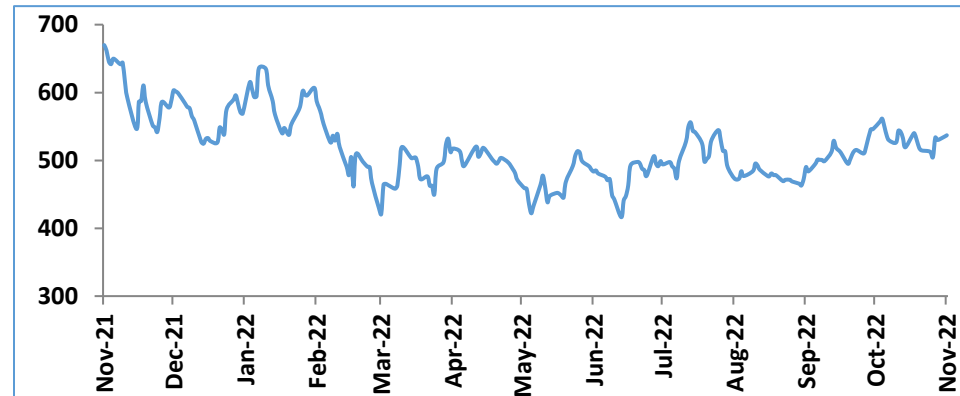
As at March	FY21	FY22	FY23E	FY24E
SOURCE OF FUNDS				
Share Capital	15.9	15.9	15.9	15.9
Reserves	1907	2417	2750	3163
Shareholders' Funds	1923	2433	2770	3179
Long Term Debt	464	100	170	255
Net Deferred Taxes	12	118	98	101
Long Term Provisions & Others	69	75	82	90
Minority Interest	0	0	0	0
Total Source of Funds	2468	2726	3116	3626
APPLICATION OF FUNDS				
Net Block (incl. CWIP)	1857	1958	2296	2674
Goodwill & Intangible Assets	13	14	14	14
Long Term Loans & Advances	69	42	54	69
Total Non-Current Assets	1939	2014	2363	2757
Inventories	609	911	968	1075
Trade Receivables	471	581	683	772
Short term Loans & Advances	3	1	3	4
Cash & Equivalents	117	48	156	255
Other Current Assets	224	223	227	221
Total Current Assets	1423	1765	2037	2326
Short-Term Borrowings	90	131	183	229
Trade Payables	694	798	964	1079
Other Current Liab & Provisions	98	107	118	127
Short-Term Provisions	12	17	20	22
Total Current Liabilities	894	1053	1285	1458
Net Current Assets	529	712	752	868
Total Application of Funds	2468	2726	3116	3626



Cash Flow Statement

(Rs Cr)	FY22	FY23E	FY24E
Reported PBT	709	561	698
Non-operating & EO items	-32	-30	-37
Interest Expenses	31	27	35
Depreciation	123	143	171
Working Capital Change	-251	66	-16
Tax Paid	-128	-162	-194
OPERATING CASH FLOW (a)	453	606	658
Capex	-227	-480	-550
Free Cash Flow	226	126	108
Investments	124	-15	-18
Non-operating income	32	30	37
INVESTING CASH FLOW (b)	-72	-466	-532
Debt Issuance / (Repaid)	-341	60	99
Interest Expenses	-31	-27	-35
FCFE	-146	160	172
Share Issuance/MI	0	0	0
Dividend	-45	-67	-91
FINANCING CASH FLOW (c)	-417	-33	-27
NET CASH FLOW (a+b+c)	-36	107	100

One Year Price Chart



Key Ratios

	FY21	FY22	FY23E	FY24E
Profitability (%)				
Gross Margin	47.4	43.5	43	43.7
EBITDA Margin	17.5	16.8	13.5	14.9
EBIT Margin	14	14.3	10.7	12
PAT Margin	9.1	9.6	7.7	8.6
RoE	18.2	21.9	15.4	17
RoCE	19.6	25.8	17.8	19.1
Solvency Ratio				
Net Debt/EBITDA (x)	0.7	0.2	0.3	0.3
D/E	0.3	0.1	0.1	0.2
Net D/E	0	0	0	0
PER SHARE DATA				
EPS	19.8	30	25.1	31.7
CEPS	27.7	37.7	34.1	42.4
BV	121	153	174	200
Dividend	0.4	5	4	5.5
Turnover Ratios (days)				
Debtor days	49	43	48	48
Inventory days	70	56	68	67
Creditors days	100	74	84	85
VALUATION				
P/E	27	17.9	21.3	16.9
P/BV	4.4	3.5	3.1	2.7
EV/EBITDA	14.7	10.8	12.9	10.4
EV / Revenues	2.6	1.8	1.7	1.5
Dividend Payout	1.8	16.7	16	17.4



HDFC Sec Retail Research Rating description

Green Rating stocks

This rating is given to stocks that represent large and established business having track record of decades and good reputation in the industry. They are industry leaders or have significant market share. They have multiple streams of cash flows and/or strong balance sheet to withstand downturn in economic cycle. These stocks offer moderate returns and at the same time are unlikely to suffer severe drawdown in their stock prices. These stocks can be kept as a part of long term portfolio holding, if so desired. These stocks offer low risk and lower reward and are suitable for beginners. They offer stability to the portfolio.

Yellow Rating stocks

This rating is given to stocks that have strong balance sheet and are from relatively stable industries which are likely to remain relevant for long time and unlikely to be affected much by economic or technological disruptions. These stocks have emerged stronger over time but are yet to reach the level of green rating stocks. They offer medium risk, medium return opportunities. Some of these have the potential to attain green rating over time.

Red Rating stocks

This rating is given to emerging companies which are riskier than their established peers. Their share price tends to be volatile though they offer high growth potential. They are susceptible to severe downturn in their industry or in overall economy. Management of these companies need to prove their mettle in handling cyclicity of their business. If they are successful in navigating challenges, the market rewards their shareholders with handsome gains; otherwise their stock prices can take a severe beating. Overall these stocks offer high risk high return opportunities.

Disclosure:

I, **Kushal Rughani, Research Analyst, (MBA)**, authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. HSL has no material adverse disciplinary history as on the date of publication of this report. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

Research Analyst or her relative or HDFC Securities Ltd. **does not have** any financial interest in the subject company. Also Research Analyst or his relative or HDFC Securities Ltd. or its Associate may have beneficial ownership of 1% or more in the subject company at the end of the month immediately preceding the date of publication of the Research Report. Further Research Analyst or her relative or HDFC Securities Ltd. or its associate **does not have** any material conflict of interest.

Any holding in stock – No

HDFC Securities Limited (HSL) is a SEBI Registered Research Analyst having registration no. INH000002475.

Disclaimer:

This report has been prepared by HDFC Securities Ltd and is meant for sole use by the recipient and not for circulation. The information and opinions contained herein have been compiled or arrived at, based upon information obtained in good faith from sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. This document is for information purposes only. Descriptions of any company or companies or their securities mentioned herein are not intended to be complete and this document is not, and should not be construed as an offer or solicitation of an offer, to buy or sell any securities or other financial instruments.

This report is not directed to, or intended for display, downloading, printing, reproducing or for distribution to or use by, any person or entity who is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, reproduction, availability or use would be contrary to law or regulation or what would subject HSL or its affiliates to any registration or licensing requirement within such jurisdiction.

If this report is inadvertently sent or has reached any person in such country, especially, United States of America, the same should be ignored and brought to the attention of the sender. This document may not be reproduced, distributed or published in whole or in part, directly or indirectly, for any purposes or in any manner.

Foreign currencies denominated securities, wherever mentioned, are subject to exchange rate fluctuations, which could have an adverse effect on their value or price, or the income derived from them. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies effectively assume currency risk.

It should not be considered to be taken as an offer to sell or a solicitation to buy any security. HSL may from time to time solicit from, or perform broking, or other services for, any company mentioned in this mail and/or its attachments.

HSL and its affiliated company(ies), their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

HSL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report, including but not restricted to, fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income, etc.

HSL and other group companies, its directors, associates, employees may have various positions in any of the stocks, securities and financial instruments dealt in the report, or may make sell or purchase or other deals in these securities from time to time or may deal in other securities of the companies / organizations described in this report.

HSL or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

HSL or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from t date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction in the normal course of business.

HSL or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither HSL nor Research Analysts have any material conflict of interest at the time of publication of this report. Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. HSL may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Research entity has not been engaged in market making activity for the subject company. Research analyst has not served as an officer, director or employee of the subject company. We have not received any compensation/benefits from the subject company or third party in connection with the Research Report.

HDFC securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 2496 5066

Compliance Officer: Murlu V Karkera Email: complianceofficer@hdfcsec.com Phone: (022) 3045 3600

HDFC Securities Limited, SEBI Reg. No.: NSE, BSE, MSEI, MCX: INZ000186937; AMFI Reg. No. ARN: 13549; PFRDA Reg. No. POP: 11092018; IRDA Corporate Agent License No.: CA0062; SEBI Research Analyst Reg. No.: INH000002475; SEBI Investment Adviser Reg. No.: INA000011538; CIN - U67120MH2000PLC152193

Mutual Funds Investments are subject to market risk. Please read the offer and scheme related documents carefully before investing.