











# Speciality Chemicals

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# LEADERSHIP POSITIONS

Globally **No. 1** in Bio-Pyridine, Bio-Picolines.

Globally **No. 1** in 18 Pyridine Derivatives.

**Only** scaled non-Chinese player.

Amongst **Top 2** in Acetic Anhydride.

Amongst **Top 2** globally in Vitamin B3.

Domestic leader in Vitamin B4.

### **COMPANY OVERVIEW**

Ingrevia is born from a union of 'Ingredients' and 'Life' ('vie' in French). Jubilant Ingrevia is committed to offering high-quality and innovative life science ingredients to enrich all life forms.

Jubilant Ingrevia Limited is a global integrated Life Science products and Innovative Solutions provider serving Pharmaceutical, Nutrition, Agrochemical, Consumer and Industrial customers with customised products and solutions that are innovative, costeffective and conforming to excellent quality standards.

The Company, with more than 40 years of experience, offers over 130 products & innovative solutions using more than 35 key chemistry and technology platforms across its three portfolios of businesses

viz Acetyls, Pyridines and Diketenes and Vitamins & Premixes, and its broad portfolio of high quality ingredients find application in a wide range of industries. The Company has 2,300 employees and serves more than 1,500 customers in more than 50 countries across the world. The Company's portfolio also extends to custom research and manufacturing for pharmaceutical and agrochemical customers on an exclusive basis.

Jubilant Ingrevia Limited is a Responsible Care certified company, driven by the motive to add value to millions of lives through innovations and cutting-edge technology. As a leader in key products that the Company manufactures, it takes pride in being a partner of choice for its valued customers.

## More than Four Decades of Transition and Progress



Sales in over 50 countries with 48% of sales in regulated markets such as US, Europe, Japan - leading to sustainable revenue



# **SPECIALITY CHEMICALS**

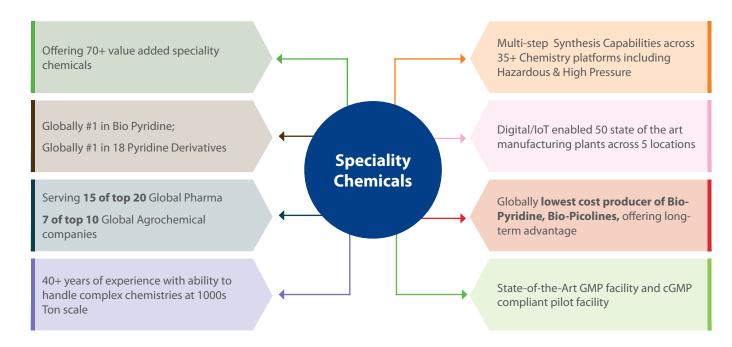
- CDMO (Custom Development and Manufacturing Organisation)
- Fine Chemicals
- Bio-Pyridine & Bio-Picolines

Speciality Chemicals are high value chemicals that touch every part of our life with their varied end uses. These products require distinctive technical expertise for production.

We have established our Global Leadership in Speciality Chemicals through decades of experience in handling and manufacturing heterocyclic compounds and their derivatives.

Innovation and superior quality are at the heart of our ethos. With our innovation focus, we have commercialized highly hazardous Diketene Chemistry and continue to establish our technological prowess in other complex chemistries.

We are a globally recognised, vertically integrated provider of innovative life sciences products and solutions. We are committed to enhancing the quality of life through our extensive portfolio that spans pharmaceuticals, agrochemicals, nutrition, consumer products, and industrial markets.





# CUSTOM DEVELOPMENT AND MANUFACTURING ORGANISATION (CDMO)

Our proficiency in Synthetic Organic Chemistry combined with our Manufacturing capabilities, has established us as a 'Partner of Choice' for global pharmaceutical and agrochemical customers. We integrate into our client's supply chains through reliable, sustainable and agile partnership, supporting the development, first scale-up and commercialization of small molecule intermediates and actives.

#### **OUR FOCUS AREAS:**

# Pharmaceuticals: Pre-Clinical, In-Phase and Commercial Small Molecule Intermediates & NCE

Our developmental services include route design, process development and process optimization for pre-phase and in-phase clinical programs and commercial small scale compounds. We also offer CMC support right from in-phase to commercial supply. We cater to both cGMP & Non-GMP requirements.

# Agrochemical Intermediates & Actives: Insecticides, Fungicides & Herbicide

With our strong chemistry capabilities, we have also forayed into custom synthesis of Agro-actives and Intermediates.

# **Electronic Chemicals: Custom grades for emerging applications**

Under this vertical through custom synthesis of high quality niche chemicals, we plan to aggressively tap into the high performance global semiconductor value chain. Our focused products include intermediates for Electronic Chemicals used as Photo Resists, Anti-reflective Coatings and Photo-Acid Generators.

#### **Hazardous Reactions**

- Hallogen including (Fluorination with HF & KF)
- Multi MT Grignard's Rxn
- Oxyme Synthesis
- · Lithiation Rxn
- Hydrazide Formation
- Ketene Chemistry

#### **Multi-Step Synthesis**

- Complex Chemistry
- >10 Step Handling
- Sugar Chemistry
- Catalytic Rxns

#### **Commercial Scalability**

- Large Reactor Volumes 1KL-16KL
- Varied Temperature Profiles-80C to +550C
- High Pressure Synthesis

#### **Consistent Quality**

- Strong Quality Management Systems
- QbD and DoE Concepts
- Regular Audits

#### **Delivery Timelines**

- Agile Delivery Concepts
- Q-OTIFs
- Customer Oriented Logistic Support

#### **Operational Compliance**

- Dow Jones Sustainability Index (DJSI): Rated Top 2 among Indian Chemical Companies & Top 5% Companies Globally
- GMP & Non GMP multi-purpose Plants
- ISO14001 & ISO9001
- OSHAS18001

# **Transparent & Effective Communication**

- Key Account Management
- Pre Sales/RFP Managament
- Dedicated Technical Project Management



#### **Reliable Suppliers**

- Long term Contracts
- Backward integration Capabilities
  - Multi-Geography Sourcing

#### **OUR CDMO DELIVERY CONCEPTS INCLUDES**

Focus of project cross functional teams on **Quality along with OTIF concepts.** 

Design of projects towards reliable delivery timelines, right from conceptualization stage (proposal submission) Key Account
Management
to address agile
requirements from
innovator clients
towards Technical,
Business and Time to
Market Concepts.

Open Client Project Interviews at agreed time intervals with stakeholders for curtailing anxiety build-up across stakeholders.







#### **Route Design**;

Process familiarization & Optimization; Analytical Development; Safety Evaluation; Pilot Plant/Kilo Lab ~22 Reactors (20L - 1KL), MSGL, SS, Cryo, PFR, (Operating temp -80 to 240°C), Autoclaves (58 kg/cm2,). Dedicated Fluorination facility with HF & KF MPP with ~ 100+ (1 - 16 KL) reactors (MSGL, SS, Hastealloy & Cryo) Fixed & Fluidized Bed Catalytic reactors, (Operating temp -80°C to 550°C),
Autoclaves (58 kg/cm2)





handle several thousand MT volumes of highly reactive compounds Ketene, Diketene & their value added derivatives at our facilities. Our offerings in this segment include Esters, Amides & Speciality Intermediates for Agro, pharma, nutrition, personal care, pigments & dyes, advanced coatings and polymer applications.

We also offer **Microbial Control Solutions** which are highly efficacious, innovative, next generation preservatives, anti-microbial actives and their synergistic formulations. They are widely used for personal care, home care and industrial applications like dandruff control, water based performance inks, decorative paints, industrial coatings, metal working fluids and performance textiles. Our actives and formulations under this segment are broadly classified into traditional and next generation solutions under the Jubithione & Jubiquat brand names.

Traditional Solutions include Pyrithiones – Zinc, Copper & Sodium and Piroctone Olamine. Next Generation Innovative Solutions include potentiation technologies based on Pyrithiones (ZPB, NPB, CZTO, ZPC+, ZPZ), Piroctone Olamine (CPO), Climbazole (CLC).

# FINE CHEMICALS

With strong presence across **speciality derivatives of pyridine & other heterocyclic compounds,** we offer over 70 commercial product offerings in this segment. Our fine chemical products are used widely across multiple applications as building blocks and interemdiates for pharmaceuticals, agrochemicals, personal care products, nutraceuticals, dyes and pigments, coatings and performance products.

With strategic vertical integration of our bio-pyridine & bio picoline portfolio combined with deep chemistry expertise, we have created multiple offerings in this segment including – Amino Pyridines, Halo Pyridines – Chloro, Fluoro and bromo derivatives, Lutidines & Collidines, Aldehydes of Pyridine, Carboxylic Acid & Carboxylates, Piperidine derivatives, Pyridine Salts etc. Our products in this segment have high bio content share for example we offer Cetylpyridinium Chloride which has 96% of bio content.

We have also established our manufacturing footprint and technological prowess in handling highlyhazardous **Diketene Derivatives** value chain. We





We have a dedicated product basket for Oil field Applications. Our OFC product basket includes high quality speciality chemicals required during protection of crude oil, mainly in primary and secondary recovery stages during specific applications including drilling, cementing, stimulation and corrosion inhibition. We offer various grades of Alkyl Pyridine Mixtures, Alkyl Pyridine Quats & Liquid Choline chloride curated to treat customers specific crude oil and water requirement with high efficiency and cost effectiveness.

# BIO-PYRIDINES & BIO-PICOLINES

This is our flagship business and the foundation for various products across industries. We have 30 years of rich technical experience in pyridine & picoline chemistry. We are the world's largest and only non-Chinese scaled player in this sector and hold a dominant position in the market. These are used as building blocks to manufacture products aimed at Agrochemical, Pharmaceutical, Nutraceutical, Personal Care, Dyes and Pigments and various industrial applications. They find specific uses in several high performance applications like electronics, Oil field etc. Interestingly, our products offerings under this segment are based of renewable materials and have bio-carbon content. Our offerings include flagship products - Bio Pyridine & Piperidine with 81% and 65% bio carbon content respectively. We also offer isomeric derivatives of Bio-Picolines and Cyanopyridines.





## PRODUCT PORTFOLIO OF 70+ SPECIALITY CHEMICALS BUILT ACROSS 35 KEY TECHNOLOGY PLATFORMS

Our 30+ years' rich technical experience has helped us to develop 35 key technology platforms supported by full scale production at our sites. We refine and spread the technical expertise to further sophisticated level of technology of high performance intermediates for advanced applications.

35 key technology platforms developed & commercialised to global standard

Research Development and Technology centres at Noida and Gajraula, India

131 highly qualified scientists with 26 PhDs

#### **Key Chemistry Capabilities**

# Ethoxylation Ammonolysis/ Amination Expertise in handling Ethylene Oxide with Catalytic vapor phase at 500+ Ramination Amination Ability to handle multiple reagents, such as Sodamide

Catalytic vapor phase at 500+
°C; 60 KT+ Pyridine capacity –
one of the largest globally

among others (Na, Ammonia, MMA, DMA, TMA, etc) **Quarternisation** 15+ yrs. exp.; Global leaders in CPC & other salts.

#### **Bromination**

dedicated setup and robust

safety systems

Dedicated set-up for handling liquid Br2 with Bromine storage tanks and other reagents NaBr, HBR etc.

#### **Grignard Reaction**

Specialized in handling the reaction with robust safety systems

## Ketene & Diketene (Cracking)

One of the largest player globally (40+ yrs. exp.); Expanded capability into Diketene

#### Oxidation

Multiple end-products expertise; 15+ yrs. exp.

#### Chlorination/ Photo-Chlorination/ Vapor Phase Chlorination

One of the largest players in India

#### **Halex Reaction**

Multiple end-products expertise using Anhydrous, KF, NaF, CsF

#### Hydrogenation

Multiple setups (6) – 60 Bar, 300oC – One-of-a-kind in India

#### **Acid Chloride Formation**

Experience across multiple reagents (SOCl<sub>2</sub>, PCl<sub>3</sub>, PCl<sub>5</sub>, POCl<sub>2</sub>)

## **Additional Chemistry Capabilities**

Vapour Phase Hoffmann Re-Bu-Li Fluorination Esterification Sandmeyer Methylation Reactions arrangement Reaction Chiral Thiol Methoxylation Iodination Aromatization N-Formylation De-alkylation Handling **Synthesis** 

Based on our technical background that is accumulated by the long-time experience and cultivated by full-scale production, various product lines were made possible with high value and high performance. For example, basic pyridine compounds are produced by vapour phase reaction and then are converted to value added downstream products through high pressure reduction & Liquid phase reactions. Jubilant has marched forward with emerging technologies like ultra or high pure synthesis of semiconductor chemicals.

# INNOVATION AND SCALE

Committed to leverage innovation and scale of operations at every step of the value chain.

## **MANUFACTURING OVERVIEW**

#### **Manufacturing Facilities**

World- Class Manufacturing Facilities with 56 Plants 3 States in India











**Gajraula,** Uttar Pradesh, India

Integrated facility for Speciality Chemicals & Chemical Intermediates **Bharuch,** Gujarat, India

Specialty Chemicals, Nutrition & Chemical Intermediates Facility in the SEZ **Nira,** Maharashtra, India

Chemical Intermediates Facility

**Savli,** Gujarat, India

Animal Nutrition & Health Solutions Facility **Ambernath,** Maharashtra, India

Microbial Control Solutions Facility

463 acres

310 acres

144 acres

109 acres 3.5 acres

Planned Investments for capacity expansion across new Green field, cGMP & non-GMP plants and Food grade & Green ethanol-based, Semiconductor related product launches

#### **Operational Capabilities**



Multi-Chemistry, Multi-Product Expertise



Continuous & Batch processes



World Class **GMP** facility at Bharuch



**cGMP** compliant Pilot Plant



Ecologically Harmonized Practices

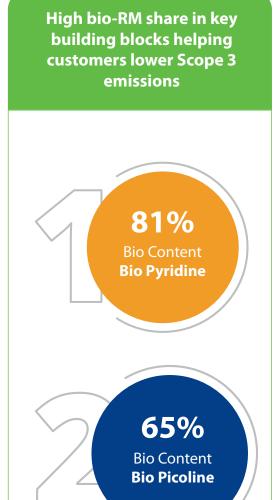


Health & Safety benchmarking global performance



# **GROWING RESPONSIBLY: HIGH BIO-RM SHARE WITH ADDITIONAL 120K MT CO<sub>2</sub> REDUCTION BY 2025**

At Jubilant Ingrevia Limited, we aim to manufacture products for customers through optimized utilisation of resources to minimise the effect on the environment. We have adopted environment protection techniques at our manufacturing facilities & strive to reduce our carbon footprint through the several energy consumption reduction initiatives and by the use of renewable energy sources.



#### Maximizing renewable energy consumption by 2025

**35%** Greening plans across Ingrevia sites leveraging Solar and Wind energy by FY'26

USD 6Mn+Investment in putting captive power plants in partnership with leading Renewable **Energy providers** 

**120K tons CO**<sub>2</sub>

reduction in next 2 years

(% Bio Based carbon tested & Confirmed based on Radiocarbon (C14) analysis conducted at ISO/IEC 17025:2017 accredited lab)



- Achieved 93 percentile in the Global Chemical Industry
- Among the top 5% companies globally
- Among top 2 Indian Chemical companies in ESG score



- Received **Gold Rating**
- Achieved 95 percentile (Score 73/100)



Global chemical industry's EHS initiative & Ethical framework towards safe chemicals management and performance excellence



CONTENT INDEX SERVICE



Climbed from 23rd to 6th position on Responsible Business Ranking by the joint ET-Future scape 8<sup>th</sup> Sustainability Index Report

#### **OUR PRESENCE ACROSS INDUSTRIES**



# **Building Blocks & Intermediates for Life Saving Drugs for Personal Longevity**

We offer speciality chemical intermediates that are widely used across key therapeutic areas like- anti-thrombotic, anti-cancer, anti-retroviral, anti-fibrosis, anti-hypertension anti-histamine and anti-ulcerative.

# Crop Protection Solutions Contributing Towards Global Food Security

Our Speciality Chemicals products are being used extensively as intermediates for various agrochemical applications. We have also started custom synthesis of agro actives.



# **Ecofriendly Personal Care Solutions for People & Planet**



We offer microbial control solutions for scalp care, skin care & oral care segments. Our products – Cetylpyridium Chloride & Zinc Pyrithione are well known actives for oral care & anti-dandruff applications. We also offer novel patented technologies for next generation anti-dandruff and hygiene care applications which are highly eco-friendly and efficacious at low concentrations. Utilizing our backward integration capabilities, we are also venturing into Piroctone Olamine, its intermediates and new cosmetic products for hair care and skin care segments.

#### **Providing Nutrition for Healthy Lives**

We supply Picolines for Vitamin B3 & picolinates-Zinc & Chromium for food & feed applications. We also offer Methyl Acetoacetate which is used in the manufacturing of Vitamin A. Several other value-added derivatives of Diketene are there in our pipeline having applications into nutraceuticals. For all these products, our strength lies in complete backward integration.





#### **Pigment & Coating Solutions for Industry**

We service paints, coatings and dyestuff industries. Our flagship product Zinc Pyrithione is used as in-can and dry film preservative and Copper Pyrithione in marine antifouling applications. Diketene Esters are used extensively in textile dyes & pigments, industrial & automotive coatings, printing inks etc. These derivatives have specific applications into diazo and pyrazolone pigments and impart orange and yellow hues.

#### **Serving Other Industrial Applications**

For industrial applications, we offer Piperidine which is used in rubber vulcanization process. Downstream derivative of Alpha picoline is a key intermediate for 2-vinyl pyridine latex used as a tyre cord binder. We also offer Sodium Pyrithione which is used as an antimicrobial agent in metal working fluids. Many of our Diketene derivatives are used as cross linkers in polymers.

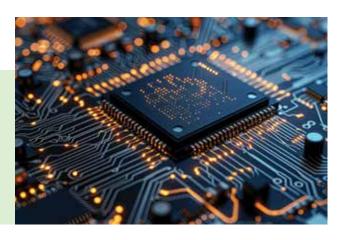


#### **Oil Field Chemicals for Oil Drilling Applications**

We offer a basket of products which are used in corrosion inhibitor formulations for oil field applications. Liquid Choline Chloride is used as a clay stabilizer in oil & gas industry. It is a safe chemical with excellent environment profile and is a best substitute against KCI & NH4CI. We also offer customized grades of Alkyl Pyridines which are complex heterocyclic mixtures containing poly alkylated pyridines. Formaldehyde in different concentrations are also offered for oil & gas industry.

#### **High Performance Applications**

We offer chemicals for sophisticated applications. Our products are used as intermediates for water fab, Performance Inks, X-Ray contrast agents etc. Our Beta Picoline, 3,5-Lutidine Pyridine and Choline find applications across semi-conductor, Polyimide films. Speciality Chemicals are used in anti-microbial textile applications. We have also started Custom Synthesis of chemicals in Photoresist, Photo-Acid Generators & Anti reflective coatings.



# **PRODUCT PORTFOLIO**

S.No.	Product Description	CAS No.	Pharma Applications	Agro Applications	Other Applications
	BIO-PYRIDINE & BIO-PICOL	INES			
1	Pyridine	[110-86-1]	Multiple APIs	Paraquat and Diquat	Dyestuffs & textiles
2	Alpha Picoline	[109-06-8]	Perhexiline, Bromazepam		
3	Beta Picoline	[108-99-6]	Multiple APIs	Multiple Agro actives	Vitamin B3
4	Gamma Picoline	[108-89-4]	Multiple APIs	Multiple Agro actives	
5	2-Cyano Pyridine	[100-70-9]	Bromazepine		
6	3-Cyano Pyridine	[100-54-9]		Niacinamide & Niacin	
7	4-Cyano Pyridine	[100-48-1]	Isoniazid		
8	Piperidine	[110-89-4]	Dipyridamole and Minoxidil	Mepiquat Chloride	Dipiperidinyl Dithium Tetrasulfide
9	Alkyl Pyridine	[68391-11-7]	Corrosion Inhibitor - Oil and Gas		
10	Alkyl Pyridine Quat	[68909-18-2]			
	FINE CHEMICALS				
11	5-Methyl-2(1H)-Pyridinone	[1003-68-5]	Pirfenidone		
12	Dabigatran Intermediate	[212322-56-0]	Dabigatran Etexilate		
13	Diethyl-3-pyridylborane	[89878-14-8]	Abiraterone Acetate		
14	2-Nitro-5-bromopyridine	[39856-50-3]	Palbociclib, Ribociclib		
15	5-Chloro-2-Nitropyridine	[52092-47-4]	Ribociclib		
16	2-Pyridineethanol	[103-74-2]	Betahistamine HCI		Picaridin
17	Piperidine-2-ethanol	[1484-84-0]	Tiquizium bromide		Picaridin
18	Pyridine-3-sulfonyl chloride	[16133-25-8]	Vonoprazan		
19	1-Bromo-2-butyne	[3355-28-0]	Linagliptin		
20	5-Bromo-7-Azaindole	[183208-35-7]	Vemurafenib, Venetoclax		
21	2-Aminomethyl piperidine	[22990-77-8]	Flecainide acetate		
22	2,6-Picolinoxylidide	[39627-98-0]	Bupivacaine		
23	N,N-Diethyl-6-Me-2,5- Pyridine Diamine.2HCl	[168091-36-9]			Electrochemical, Dyes, INK
24	4-Amino pyridine	[504-24-5]	Indoramin; Timiperone, Torsemide		
25	2,3-Lutidine	[583-61-9]	Lansoprazole; Rabeprazole		

26	2.5.1				
	3,5-Lutidine	[591-22-0]	Omeprazole; Esomeprazole	Pyroxulam	Electronics
27	2,3,5-Collidine	[695-98-7]	Omeprazole; Esomeprazole		
28	2,4-Lutidine	[108-47-4]	Lufironil		
29	2,5-Lutidine	[589-93-5]	Sunepitron		
30	2,6-Lutidine	[108-48-5]	Amoxycillin, Clopidol		
31	2,4,6-Collidine	[108-75-8]	Vitamin D; Dydrogesterone		
32	3,5-Dimethyl piperidine	[35794-11-7]	Pirmenol hydrochloride; Tilmicosin		
33	2-Amino pyridine	[504-29-0]	Piroxicam; Sulphasalazine, Dabigatran	Sulfosulfuron; Flupyrimin; Triflumezopyrim	
34	2-Amino-3-methyl pyridine	[1603-40-3]	Pemirolast,Lumacaftor		
35	2-Amino-4-methyl pyridine	[695-34-1]	Piketoprofen; Rifaximin		
36	2-Amino-5-methyl pyridine	[1603-41-4]	Zolpidem , Pirfenidone	Haloxyfop	
37	2-Amino-6-methyl pyridine	[1824-81-3]	Nalidixic acid; Rimazolium metilsulfate	Picarbutrazox	
38	4-(Dimethylamino)pyridine	[1122-58-3]	Zidovudine; Abacavir; Montelukast; Apalutamide; Orlistat	Chlorpyrifos, Clethodim	Catalyst
39	2-Amino-5-chloropyridine	[1072-98-6]	Etoricoxib; Edoxaban	ClodinafopP	
40	2-Aminomethyl pyridine	[3731-51-9]	Flecainide acetate		
41	2-Aminomethyl piperidine	[22990-77-8]	Flecainide acetate		
42	3-Aminomethyl pyridine	[3731-52-0]	Nicotinyl alcohol; Picotamide		
43	5-ethyl-2-methylpyridne	[104-90-5]	Etoricoxib, Pioglitazone	Topramezone	Niacin, Niacinamide
44	Azacyclonol	[115-46-8]	Fexofenadine		
45	Cetyl Pyridinium Chloride	[6004-24-6]			Oral care
46	2-Bromopyridine	[109-04-6]	Bromazepam, Triprolidine		
47	2,6-Dibromopyridine	[626-05-1]	Acrivastine, Lasmiditan		
48	3-Bromopyridine	[626-55-1]	Abiraterone, Niraparib	Tyclopyrazoflor	
49	2-Chloropyridine	[109-09-1]	Chlorpheniramine	Pyriproxyfen	

S.No.	Product Description	CAS No.	Pharma Applications	Agro Applications	Other Applications
50	2,6-Dichloropyridine	[2402-78-0]	Flupirtine, Liranaftate	Pyributicarb	
51	2,3-Dichloro Pyridine	[2402-77-9]		Chlorantraniliprole, Cyantraniliprole	
52	Pyridine-2-aldehyde	[1121-60-4]	Bisacodyl; Sodium picosulfate	Pyriprole	
53	Pyridine-3-aldehyde	[500-22-1]		Pymetrozine	
54	2-Hydroxymethyl pyridine	[586-98-1]	Bevonium Metilsulfate; Pineprofen		
55	3-Hydroxymethylpyridine	[100-55-0]	Oral Care		
56	Isonipecotic acid	[498-94-2]	Risperidone; Paliperidone		
57	2-Aminomethyl pyridine	[3731-51-9]	Flecainide acetate		
58	Pyridine Hydrochloride	[628-13-7]	Cephalosporins		
59	Piperidine Hydrochloride	[6091-44-7]	Benproperine; Bietamiverine		
60	Pyridine Hydrobromide	[18820-82-1]	Cephalosporins		
61	Picolinic acid	[98-98-6]	Bepotastine; Pirmenol		
62	5-Methyl nicotinic acid	[3222-49-9]	Rupatadine		
63	2-Acetylpyridine	[1122-62-9]	Doxylamine		Flavors & Fragrance
64	3-Acetylpyridine	[350-03-8]	Imatinib		Flavors & Fragrance
65	Chromium picolinate	[14639-25-9]	Health supplements		
66	Zinc picolinate	[17949-65-4]	Health supplements		
67	3-Hydroxy-2- methylpyridine	[1121-25-1]	Halofuginone	Febrifugine	
68	3-Hydroxypiperidine	[6859-99-0]	Benidipine		
69	N-Formyl piperidine	[2591-86-8]	Irinotecan, Maropitant	Fluazaindolizine	
	DIKETENE DERIVATIVES				
70	Methyl Acetoacetate	105-45-3	Amoxycillin, Atorvastatin,	Clethodim, Primiphos, Diazenone	Vitamin -E, Vitamin -A, Colorants
71	Ethyl Acetoacetate	141-97-9	Glimeprid, Baclofan, Felodipine		Pigments, Dye and F&F
72	Tertiary Butyl Acetoacetate	1694-31-1	Cefixime, Sunitinib	Acyloin, β – unsaturated ketones	
73	Monomethyl acetoacetamide	5977-14-0		Monocrotophos	

S.No.	Product Description	CAS No.	Pharma Applications	Agro Applications	Other Applications	
74	2-Acetoacetoxyethyl methacrylate	[21282-97-3]			Coatings	
75	Methyl 3,3-dimethylacrylate	[924-50-5]			Personal Care	
76	Ethyl-2-Chloro Acetoacetate	[609-15-4]	Apixaban, Febuxostat		Vitamin B6	
77	Dimethyl Acetoacetamide	[2044-64-6]			Copromoter-Resins	
78	Piroctone Olamine	[68890-66-4]			Personal Care	
	MICROBIAL CONTROL SOLUTIONS					
79	Jubithione – Zinc Pyrithione 40%	[13463-41-7]	Industrial Applications, Paints, etc			
80	Jubithione – Zinc Pyrithione 50%	[13463-41-7]	Biocide for Personal Care			
81	Jubithione – Zinc Pyrithione + CPC	[NA]				
82	Jubiquat Climbazole + CPC	[NA]				
83	Jubithione – Zinc Pyrithione + Zinc	[NA]				
84	Jubithione – Copper Pyrithione	[17652-46-9]				
85	Jubithione – Sodium Pyrithione	[3811-73-2]	Biocide for Industrial Applications, Paints, etc			
86	Jubithione Diuron+OIT+ Zinc Pyrithione	[NA]				
87	Jubithione Sodium Pyrithione + BIT	[NA]	Biocide for Industrial Applications - Metal working fluids			
88	Jubithione Zinc Pyrithione + BIT	[NA]				







Jubilant Ingrevia Limited is a global integrated Life Science products and Innovative Solutions provider serving Pharmaceutical, Nutrition, Agrochemical, Consumer and Industrial customers with customised products and solutions that are innovative, cost-effective and conforming to excellent quality standards.

The Company offers a broad portfolio of high-quality ingredients that find application in a wide range of industries. The Company has 2,300+ employees and serves more than 1,500 customers in more than 50 countries across the world. The Company's portfolio also extends to custom research and manufacturing for pharmaceutical and agrochemical customers on an exclusive basis.



#### **CORPORATE OFFICE**

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