

**FINE CHEMICALS AND  
CROP PROTECTION  
CHEMICALS**





## Fine Chemicals and Crop Protection Chemicals

With a strong presence across the entire value chain of Pyridine and Picolines, the Fine Chemicals and Crop Protection Chemicals business touches varying aspects of the human life – from Pharmaceuticals, to Coatings, Personal Care, Food, Nutrition, Electronic Chemicals etc. We offer a range of Value Added Ingredients, Actives and Formulations for these industries, all benchmarked to rigorous international standards.

## BUSINESS OVERVIEW

### Fine Chemicals

We offer over **70 commercial Pyridines, Picolines, Piperidine based intermediates** which are used globally by Pharmaceutical, Healthcare, Electronics and other industries. **We are a global leader in 14 pyridine based intermediates** and striving to make other products fall in the same league. We have launched a new portfolio of Diketene derivatives at our facility in Gajraula with 4 new products commissioned.

### Custom Development & Manufacturing Organization

The business provides Contract Development and Manufacturing services for

- Key Starting Materials and Regulatory Starting Materials
- Advanced Intermediates with final step in WHO and Third Party certified GMP Plant
- Patented or Generic API's under cGMP Guidelines.

We apply **Design for Six Sigma (DFSS)** and **Design of Experiments (DOE)** concepts to develop Cost Efficient processes for multi-step synthesis with emphasis on scalability, ease of operation, robustness and sustainability. The services can be provided under secrecy agreements if required.

Committed to sustainable operations, Jubilant Ingrevia is **Responsible Care® 14001:2003 certified** under the American Chemistry Council's (ACC) Responsible Care® program for its Corporate Office, Noida and for the Manufacturing Unit Gajraula.

### OUR EDGE

- **Over 35 Years** of R&D integration experience
- Global Reach across **over 100 countries**
- Leadership positions in **over 14 products** and growing
- Dedicated Top Management commitment to all Quality and Regulatory Compliances
- Focus on Continuous improvement through Business Excellence
- Strong Initiatives for EHSS, Corporate Sustainability, CSR and Green Manufacturing
- Recognised for its continuous innovation over the last 12 years
- The Fine Chemicals business has been granted **34 process patents** in various countries including India, Japan, USA, UK, Ireland, China and Switzerland

## Crop Protection Chemicals

Crop Protection Chemicals business of Jubilant Ingrevia offers value added Intermediates & Actives for Agrochemical industry. We are a preferred supplier to agrochemical customers across the globe.

### Anti-Microbials

We have a range of safe and highly efficacious anti-microbial solutions for applications in Paints, Coatings, Industrial, Cosmetic and Personal Care industries. Range of Products includes Jubithione® (ZPT-50, ZPT-40, ZPT Powder, CuPT, NaPT) Class of Pyrithiones, Cetyl Pyridinium Chloride, Per-Acetic Acid 15% & 35% solution.

In addition we have developed New Synergistic & Innovative Antidandruff Products like Jubithione® ZPC, Jubiquat™ CLC, Low Cost In Can & Dry film Preservation Solutions like Jubithione® ZPB, Jubithione® NPB, Boosted Preservation Solutions Jubigaurd® PHG and PCG, & Complete Oral Care solutions Jubiquat® CPL

We have also developed our in-house range of ethanol-based hand sanitizers - Hands Together - Safe Hands Make a Safe World. They are available in WHO recommended formulations; 80% Ethanol, 1.45% Glycerol and 0.125% Hydrogen Peroxide. Other variants with 70% Ethanol and Chlorhexidine Gluconate (CHG) are also available.

## PRODUCT OFFERINGS

### 2-Chloro-6-Trichloromethylpyridine

2-Chloro-6-Trichloromethylpyridine is the key Advanced Intermediate to produce various pesticides including Fungicide. Jubilant is producing 2-Chloro-6-Trichloromethylpyridine through a niche technology developed through in-house R&D using Alpha Picoline as a Starting material which is produced captively. Jubilant is committed to remain a cost effective and sustainable supplier of 2-Chloro-6-Trichloromethylpyridine to all its customers.

### 2-Chloropyridine (2-CP)

2-Chloropyridine is an intermediate used mainly in synthesis of Biocides and to produce Pyriproxyfen, an insecticides as well as to generate antihistamines for pharmaceutical purposes. Jubilant is producing 2-Chloropyridine using Pyridine as a starting material. Jubilant is committed to remain a cost effective and sustainable supplier of 2-CP to all its customers.

### PCP (2, 3, 4, 5, 6-Pentachloropyridine)

PCP is the basic building block for the production of Fluroxypyr (Herbicide). Jubilant is producing PCP through a niche technology developed through in-house R&D, using Pyridine as a starting material which is produced captively.

### 2, 3 – Dichloropyridine (2,3-DCP)

2, 3-Dichloropyridine is a key intermediate for production of many insecticides. Jubilant is producing 2,3-DCP through a niche technology using Pyridine as a starting material which is produced captively. Jubilant is committed to remain a cost effective and sustainable supplier of 2,3-DCP to all its customers.

### 2-Fluoro-6-Trifluoromethylpyridine

2-Fluoro-6-Trifluoromethylpyridine is the key Advanced Intermediate to produce Fungicide. Jubilant is producing 2-Fluoro-6-Trifluoromethylpyridine through a niche technology developed through in-house R&D using Alpha Picoline as a starting material which is produced captively. Jubilant is committed to remain a cost effective and sustainable supplier of 2-Fluoro-6-Trifluoromethylpyridine to all its customers.

### Custom Development & Manufacturing Offering (Agro Intermediates & Actives)

Jubilant provides Custom Development and Manufacturing Services for Agro Chemicals industry – including both Intermediates & Actives for global agro customers, through specific long

term agreements. Its expertise lies in developing customisable, cost effective, efficient and scalable processes for specific products (Intermediates & Actives). The business has several ongoing, successful long term arrangements with its customers and global agrochemical companies.

### **Pyriproxyfen**

Pyriproxyfen is an Insecticide widely used on Cotton and Soybean for control of Whitefly, aphids and also used as Larvicide on still water reserves. Jubilant is planning to produce Pyriproxyfen in its upcoming state of the art agrochemical manufacturing facility at Bharuch. Developed through in-house R&D using 2-chloropyridine as a key raw material which is produced indigenously with complete backward integration Jubilant is committed to deliver cost effective and sustainable agrochemical solutions.

### **Picoxystrobin**

Picoxystrobin is a selective fungicide used for treatment of Asian rust on Soybean. Jubilant is planning to produce Picoxystrobin in its upcoming state of the art agrochemical manufacturing facility at Bharuch. Developed through in-house R&D using 2-chloro-6 trichloromethyl pyridine as a key raw material which is produced captively with complete backward integration from Alpha Picoline.

### **Pymetrozine**

Pymetrozine is an Insecticide used on Rice, Potatoes, fruits & Vegetables for control of brown plant hoppers. Jubilant is coming up with Pymetrozine in its upcoming worldclass agrochemical manufacturing facility at Bharuch. Developed through in-house R&D using Pyridine-3-aldehyde as a key raw material which is produced captively Jubilant is committed to provide cost effective solutions to all its customers.

### **Chlorantraniliprole**

Chlorantraniliprole is the biggest Insecticide in the global agrochemical market majorly used on fruits

& vegetables and rice for control of Lepidoptera's and stem borers. Developed through in-house R&D using 2,3 Dichloropyridine as a key starting material which is produced indigenously with complete backward integration starting from Pyridine.

### **Prothioconazole**

Prothioconazole is a selective fungicide used for treatment of Asian rust on soybean and blights on cereals. Jubilant is planning to produce Prothioconazole in its upcoming agrochemical manufacturing facility at Bharuch. Developed through in-house R&D using Acetyl Butyro Lactone as a key raw material with complete backward integration starting from Diketene. Jubilant aims to build successful long term arrangements with customers.

### **Fluroxypyr**

Fluroxypyr is a selective herbicide used for control of broadleaf weeds and woody plants for cereals, maize and sugarcane. Developed through in-house R&D using Pentachloropyridine as a key starting material which is produced captively with complete backward integration starting from Pyridine. Jubilant is committed to deliver cost effective solutions to all its customers.

### **Picloram**

Picloram is a selective herbicide used for control of broadleaf weeds, woody plants and vines in Non-crop rangelands and Pastures. Developed through in-house R&D using 2-Cyanopyridine as a key starting material which is produced captively with complete backward integration starting from Alpha Picoline.

### **Clopyralid**

Clopyralid is a selective herbicide used for control of broadleaf weeds and woody plants in forest and industrial sites. Developed through in-house R&D using 2-Cyanopyridine as a key starting material which is produced captively with complete backward integration starting from Alpha Picoline.

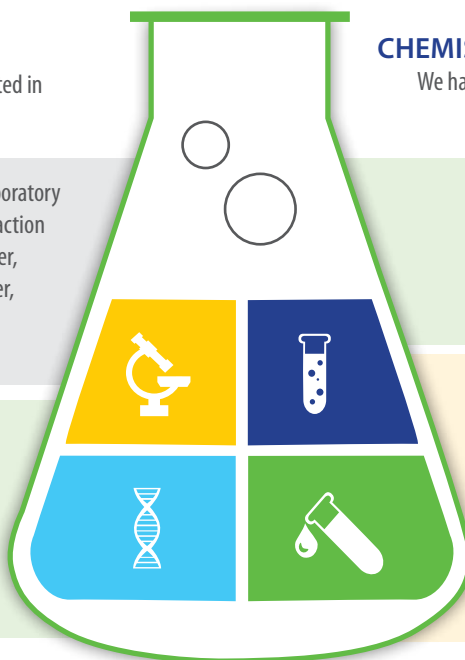
## Innovative Products and Economically Efficient Solutions

### R&D CAPABILITIES

The Fine Chemicals business has 2 R&D facilities located in Gajraula (Near Delhi), Noida (near Delhi)

All R&D facilities have fully equipped analytical laboratory with advance equipment including: NMR, XRD, Reaction Calorimeter, LC-MS, Prep HPLC, Particle Size Analyzer, Optical Microscope, Stability Chambers, Polarimeter, IR, DSC, TSC etc.

All projects in R&D are coded and distributed to maintain strict confidentiality



### CHEMISTRY & TECHNOLOGY PLATFORMS

We have developed several chemistry platforms and attained expertise in the following technologies

Grignard Reactions, High Pressure Reactions, Oxime Reactions, Chichibabin reaction, Lachrymetric reactions at high volumes

Chiral Synthesis-, Stereo Selective Synthesis, Biotransformation, Fluorination using KF & HF, Photochlorination, Polychlorination, Liquid & Vapour phase Chlorination, Bromination, , Halogenation & Dehalogenation, Quartermisation

### MANUFACTURING OVERVIEW

The business has one Pilot Plant located at Gajraula (near Delhi) and 12 Manufacturing plants located at 3 sites – Gajraula (near Delhi), Ambernath (Maharashtra) and Bharuch.

**Pilot Plant** - a GMP Compliant Facility with reactors ranging from 20L to 630L (Glass assemblies, Cryogenic reactors & Autoclaves) with different metallurgies – GLR, SS, Hastelloy. These operate at temperatures from -90 °C to 200 °C and pressure upto 58 kg/cm<sup>2</sup>.

**WHO & Third Party Certified GMP Plant for RSM and GMP Intermediates at Bharuch** - with Temperature, Humidity and Pressure controlled areas, ISO-8 Clean room, dedicated HVAC systems, quarantined powder processing area, and combination of MSGLR and SS-316 reactors of 5-6 KL capacity.

**Commercial plants** have over 100 reactors (MSGLR, SS, Hastelloy and Cryogenic) ranging from 1KL to 14KL. These operate at wide range of process conditions for multi-product manufacturing.





## CERTIFICATIONS

The QC laboratories are NABL certified with Standard ISO/IEC 17025:2005 certification.

ISO  
9001:2008

ISO  
14001: 2004

OHSAS  
18001: 2007

### Project Management

An exclusive Project Management Office (PMO) has been introduced for a customer centric approach to Custom Manufacturing Services. Each project in Custom Manufacturing is handled with care by a certified Project Manager (PM). Designated PM is the single point of contact for customers. The processes are structured to map project progress, documentation etc. with the help of Enterprise Project Management (EPM) software

### Global Reach

Jubilant has a noticeable global footprint, owing to its network of offices and warehouses in India, USA, Europe and China. This network is backed by a strong supply chain, ensuring consistent supply of products to various locations in the world.

### Dow Jones Sustainability Index (DJSI) 2021

Jubilant Ingrevia Limited was assessed for Corporate Sustainability Assessment by prestigious S&P Global for Dow Jones Sustainability Index (DJSI) 2021. The Company achieved 81 percentile in the Global Chemical Industry and is among the top 20% companies globally and among the top three Chemical Companies in India in DJSI - Environmental, Social and Governance (ESG) Score. The Company also achieved a full score in Customer Relationship Management, Environmental Reporting and Social Reporting criteria.

[Score Date: Nov 12, 2021]

## SUSTAINABILITY

### Low Carbon Footprint

Use of Green raw materials (Corn/Cane Ethanol) for majority of products, resulting in lower carbon footprint compared to petroleum based manufacturing

**Jubilant is increasing productivity and drastically cutting waste by the use of Green Chemistry Toolbox along with Solvent Recovery Plants, Multi-effect Evaporators and Waste Heat Boilers, Zero Liquid Discharge plants.**

Jubilant contributes to the planet's most precious resource, water, by 100% recycling with the use of latest technologies.

### Ecovadis

**Registered with Ecovadis for CSR evaluation with a gold rating;** with this Gold Rating Jubilant's performance has been rated among top 5% companies globally.

## PRODUCT PORTFOLIO

S. No	Product Description	CAS No	Chemical Name	Molecular Formula	Pharma Applications	Agro Applications	Other Applications	Status
1	Methyl Acetoacetate	105-45-3	Methyl 3-oxobutanoate	C5H8O3	Amoxicillin, Domperidonepentoxyfillin, Atorvastatin, Cloxacillin	Clethodim, Primiphos, Diazenone	Vitamin -E, Vitamin -A and colorant	Commercial-Regular
2	Ethyl Acetoacetate	141-97-9	Ethyl 3-oxobutanoate	C6H10O3	Ampicillin, Glimeprid, Imepenam, Baclofan, Felodipine		Pigments, Dye and F&F	Commercial-Campaign based
3	Tertiary Butyl Acetoacetate	1694-31-1	tert-Butyl 3-oxobutanoate	C8H14O3	Cefixime, Sunitinib	Acyloin, $\beta$ – unsaturated ketones		Commercial-Campaign based
4	Monomethyl acetoacetamide	5977-14-0	N-methyl-3-oxobutanamide	C5H9NO2		Monocrotophos, dicrotaphos		Commercial-Regular
5	5-Methyl-2(1H)-Pyridinone	[1003-68-5]	2-Hydroxy-5-methylpyridine	C6H7NO	Pirfenidone			Commercial-Campaign Based
6	5-Methyl-2(1H)-Pyridinone	[1003-68-5]	2-Hydroxy-5-methylpyridine	C6H7NO	Pirfenidone			Commercial-Campaign Based
7	N-[[3-Amino-4-(Methylamino)Phenyl] Carbonyl]-N-(2-Pyridinyl)-Beta-Alanine Ethylester	[212322-56-0]	N-[[3-Amino-4-(Methylamino)Phenyl] Carbonyl]-N-(2-Pyridinyl)-Beta-Alanine Ethylester	C18H22N4O3	Dabigatran Etxilate			Scaled in Kilograms Qtys
8	Diethyl-3-pyridylborane	[89878-14-8]	"3-pyridinyldiethyl borane, (diethylboryl)pyridine"	C9H14BN	Abiraterone Acetate			Commercial-Campaign Based
9	2-Nitro-5-bromopyridine	[39856-50-3]	5-Bromo-2-nitro-pyridine	C5H3BrN2O2	Palbociclib, Ribociclib			Commercial-Campaign Based
10	5-Chloro-2-Nitropyridine	[52092-47-4]	3-Chloro-6-nitropyridine	C5H3ClN2O2	Ribociclib			Scaled in Kilograms Qtys
11	5-Bromo-7-Azaindole	[183208-35-7]	5-Bromo-7-azaindole	C7H5BrN2	Vemurafenib, Venetoclax			Commercial-Campaign Based
12	2-Pyridineethanol	[103-74-2]	2-pyridin-2-yl-ethanol	C7H9NO	Mesoridazine, Thioridazine, Betahistamine HCl			Commercial-Regular
13	Piperidine-2-ethanol	[1484-84-0]	2-Piperidine ethanol	C7H15NO	Icaridin, Tiquizium bromide, Mesoridazine			Commercial-Campaign Based
14	(R)-3-(Boc-amino) Piperidine	[309956-78-3]	((R)-3-(Boc-Amino) piperidine	C10H20N2O2	Linagliptin			Scaled up
15	(R)-(-)-3-Amino piperidine Dihydrochloride	[334618-23-4]	(R)-3-Piperidinamine dihydrochloride	C5H14Cl2N2	Alogliptin			Developed in R&D
16	2-Amino-3-hydroxypyridine	[16867-03-1]	2-Amino-pyridin-3-ol	C5H6N2O	Paliperidone		Cosmetics	Commercial-Campaign Based
17	Pyridine-2,3-dicarboxylic acid	[89-00-9]	Quinolinic acid	C7H5NO4	Moxifloxacin	Imazepyr		Scaled in Kilograms Qtys

S. No	Product Description	CAS No	Chemical Name	Molecular Formula	Pharma Applications	Agro Applications	Other Applications	Status
18	Pyridine-3-sulfonic acid	[636-73-7]	Pyridine-3-sulfonic acid	C5H5NO3S	New Drug			Commercial-Campaign Based
19	Chromium picolinate	[14639-25-9]	Chromium picolinate	3(C6H4NO2).Cr	Health supplements		Health supplements	Commercial-Campaign Based
20	Zinc picolinate	[17949-65-4]	Zinc picolinate	C12H8N2O4.Zn	Health supplements		Health supplements	Commercial-Campaign Based
21	3-Hydroxy-2-methylpyridine	[1121-25-1]	2-Methylpyridin-3-ol	C6H7NO	Pantoprazole	Febrifugine; Halofuginone		Commercial-Campaign Based
22	3-Hydroxypiperidine	[6859-99-0]	3-Hydroxypiperidine	C5H11NO	Benidipine, menpenzolate bromide,			Commercial-Campaign Based
23	2-Bromo-3-Methyl pyridine	[3430-17-9]	2-BROMO-3-PICOLINE	C6H6BrN	Lumacaftor			Commercial-Campaign Based
24	2-Bromo-5-Methylpyridine	[3510-66-5]	2-Bromo-5-picoline	C6H6BrN	Abametapir			Commercial-Campaign based
25	2-Aminomethyl piperidine	[22990-77-8]	Piperidin-2-yl-methylamine	C6H14N2	Flecainide acetate			Commercial-Campaign Based
26	3-Hydroxymethyl pyridine (Pyridine-3-methanol)	[100-55-0]	Pyridin-3-yl-methanol	C6H7NO	Indinavir; Nicofibrate			Commercial-Campaign Based
27	N-(2-Chloroethyl) piperidine hydrochloride	[2008-75-5]	N-(2-Chloroethyl) piperidine hydrochloride	C7H15Cl2N	Cloperastine, Fenpiverinium bromide, Picoperine, Pipethanate, Pitofenone, Raloxifene			Scaled in Kilograms Qty
28	2-Bromo-5-nitropyridine	[4487-59-6]	2-Bromo-5-nitropyridine	C5H3BrN2O2	New Drug			Developed in R&D
29	Pyridine-3-sulfonyl chloride	[16133-25-8]	3-pyridinesulfonyl chloride	C5H4ClNO2S	Vonoprazan			Commercial-Campaign Based
30	Pyridine-2,4-dicarboxylic acid	[499-80-9]	Lutidinic acid	C7H5NO4			Cosmetics	Developed in R&D
31	1-Bromo-2-butyne	[3355-28-0]	1-Bromo-2-butyne	C4H5Br	Linagliptin			Commercial-Campaign Based
32	7-Azaindole	[271-63-6]	7-Azaindole	C7H6N2	Vemurafenib, Venetoclax			Commercial-Campaign Based
33	2,6-Picolinoxylidide	[39627-98-0]	N-(2,6-Dimethylphenyl)-2-picolinamide	C14H14N2O	Mepivacaine, Bupivacaine			Commercial-Campaign Based
34	N2, N2-Diethyl-6-Methyl-2,5-Pyridine Diamine Dihydrochloride	[168091-36-9]	3-amino-6-diethylamino-2-methyl pyridine	C10H17N3.2HCl			Electrochemical, Dyes, INK	Commercial-Campaign Based



S. No	Product Description	CAS No	Chemical Name	Molecular Formula	Pharma Applications	Agro Applications	Other Applications	Status
35	4-Amino pyridine	[504-24-5]	Pyridin-4-ylamine	C5H6N2	Indoramin; Lexipafant; Milverine; Octenidine; Pinacidil; Timiperone			Commercial-Campaign Based
36	2,3,5-Collidine	[695-98-7]	2,3,5-Trimethylpyridine	C8H11N	Omeprazole; Esomeprazole			Commercial - Regular Production
37	2,3-Lutidine	[583-61-9]	2,3-Dimethylpyridine	C7H9N	Lansoprazole; Rabeprazole; Moxifloxacin; Dexlansoprazole, Loratadine			Commercial - Regular Production
38	2,6-Dichloropyridine	[2402-78-0]	2,6-Dichloropyridine	C5H3Cl2N	Enoxacin, Flupirtine, Liranaftate	Pyributicarb		Commercial - Regular Production
39	2-Amino pyridine	[504-29-0]	Pyridin-2-ylamine	C5H6N2	Piroxicam; Risperidone; Tenoxicam; Mepyramine; Methapyrilene; Fenyramidol; Sulphasalazine; Chloropyrilene; Mepifylline, Dabigatran	Clodinafop; Imazosulfuran; Rimsulfuron; Sulfosulfuron		Commercial - Regular Production
40	2-Amino-3-methyl pyridine	[1603-40-3]	3-Methylpyridin-2-ylamine	C6H8N2	Pemirolast, Lumacaftor			Commercial - Regular Production
41	2-Amino-4-methyl pyridine	[695-34-1]	4-Methylpyridin-2-ylamine	C6H8N2	Nevirapine; Piketopufen; Rifaximin			Commercial - Regular Production
42	2-Amino-5-methyl pyridine	[1603-41-4]	5-Methylpyridin-2-ylamine	C6H8N2	Zolpidem , Pirfenidone	Chlorfluazuron; Fluazuron; Haloxyfop		Commercial - Regular Production
43	2-Amino-6-methyl pyridine	[1824-81-3]	6-Methylpyridin-2-ylamine	C6H8N2	Nalidixic acid; Rimazolium metilsulfate			Commercial - campaign based
44	2-Bromopyridine	[109-04-6]	2-Bromopyridine	C5H4BrN	Carbinoxamine; Chlorpyramine; Disopyramide; Pipradrol; Triprolidine; Lafutidine; Piclozotan; Taprizosin; Atazanavir			Commercial - Regular Production
45	2-Chloropyridine	[109-09-1]	alpha-Chloropyridine	C5H4ClN	Chlorpheniramine, Methyl phenidate, Chlorpyrilene	Pyriproxyfen		Commercial - Regular Production
46	2-Hydroxymethyl pyridine (Pyridine-2-methanol)	[586-98-1]	Pyridin-2-yl-methanol	C6H7NO	Bevonium Metilsulfate; Pineprofen, Ibuprofen piconol			Commercial - Regular Production
47	3,5-Dimethyl piperidine	[35794-11-7]	3,5-dimethyl piperidine	C7H15N	Pirmenol hydrochloride; Tilmicosin			Commercial - campaign based
48	3,5-Lutidine	[591-22-0]	3,5-Dimethylpyridine	C7H9N	Omeprazole; Esomeprazole; Rupatadine			Commercial - Regular Production

S. No	Product Description	CAS No	Chemical Name	Molecular Formula	Pharma Applications	Agro Applications	Other Applications	Status
49	4-(Dimethylamino) pyridine	[1122-58-3]	Dimethylpyridin-4-ylamine	C7H10N2	Zidovudine; Abacavir; Lamivudine; Montelukast; Docetaxel; Paclitaxel; Alfentanil; Carfentanil; Cladribine;	Chlorpyrifos		Commercial - Regular Production
50	5-ethyl-2-methylpyridne	[104-90-5]	5-ethyl-2-methylpyridne	C8H11N	Etoricoxib , Pioglitazone	new intermediate	Niacin, Niacinamide	Commercial - Regular Production
51	Azacyclonol	[115-46-8]	alpha,alpha-Diphenyl-4-piperidinomethanol	C18H21NO	Fexofenadine; Diphemanil methylsulfate, Terfenadine			Commercial - Regular Production
52	Cetyl Pyridinium Chloride	[6004-24-6]	1-Hexadecylpyridinium chloride	C21H38ClN.H2O			Mouthwashes, Preservative, Oral care	Commercial - Regular Production
53	Isonicotinic Acid	[55-22-1]	4-Pyridinecarboxylic acid	C6H5NO2	Aconiazide; Cefsulodin; Iproniazid; Metrenperone; Nialamide; Pasiniazid; Terfenadine; Trimedoxime; Iloperidone; Fampridine	Forchlorfenuron, Inabenfide		Commercial - Regular Production
54	Isonipectic acid	[498-94-2]	Piperidine-4-carboxylic acid	C6H11NO2	Declenperone; Metrenperone; Risperidone; Ocaperidone; Paliperidone			Commercial - Regular Production
55	Pyridine Hydrobromide	[18820-82-1]	Pyridine hydrobromide	C5H6BrN	Cephalosporins; Cephalaxin			Commercial - Regular Production
56	Pyridine-2-aldehyde	[1121-60-4]	Pyridine-2-carbaldehyde	C6H5NO	Bisacodyl; Sodium picosulfate; Pralidoxime iodide, Carbinoxamine			Commercial - Regular Production
57	2,4,6-Collidine	[108-75-8]	2,4,6-Trimethylpyridine	C8H11N	Vitamin D; Dydrogesterone			Commercial-Campaign Based
58	2,4-Lutidine	[108-47-4]	2,4- Dimethylpyridine	C7H9N	Lufironil			Commercial-Campaign Based
59	2,5-Lutidine	[589-93-5]	2,5- Dimethylpyridine	C7H9N	Sunepitron			Commercial-Campaign Based
60	2,6-Diamino Pyridine	[141-86-6]	2,6- Diamino Pyridine	C5H7N3	Phenazopyridine			Commercial-Campaign Based
61	2,6-Dibromopyridine	[626-05-1]	2,6- Dibromopyridine	C5H3Br2N	Acrivastine			Commercial-Campaign Based
62	2,6-Lutidine	[108-48-5]	2,6- Dimethylpyridine	C7H9N	Ampicillin, Amoxycillin, Gemcitabine; Everolimus, Clopidol; Nifurpirinol; Pirmenol; Pirozadil; Pyricarbonate; Tetomilast			Commercial-Campaign Based
63	2-Acetylpyridine	[1122-62-9]	2-Acetylpyridine	C7H7NO	Doxylamine			Commercial-Campaign Based

S. No	Product Description	CAS No	Chemical Name	Molecular Formula	Pharma Applications	Agro Applications	Other Applications	Status
64	2-Amino-5-chloropyridine	[1072-98-6]	2-Amino-5-chloropyridine	C5H5ClN2	Zopiclone, Eszopiclone; Etoricoxib; Metrenperone,Edoxaban	ClodinafopP		Commercial-Campaign Based
65	2-Aminomethyl pyridine	[3731-51-9]	C-Pyridin-2-yl-methylamine	C6H8N2	Flecainide acetate			Commercial-Campaign Based
66	2-Pyridoacetonitrile	[2739-97-1]	2-Pyridylacetonitrile	C7H6N2	Mefloquine			Commercial-Campaign Based
67	3,4-Lutidine	[583-58-4]	3,4-Dimethylpyridine	C7H9N	Pentazocine; Phenazocine			Commercial-Campaign Based
68	3,5-Dibromopyridine	[625-92-3]	3,5-Dibromopyridine	C5H3Br2N	Lorlatinib, Crenigacestat, Ispronidine			Commercial-Campaign Based
69	3-Acetylpyridine	[350-03-8]	3-Acetylpyridine	C7H7NO	Telithromycin; Imatinib mesylate, Rasitonic acid,Nilotinib,Masitinib		Metyrapone,In Flavour and Fragrance	Commercial-Campaign Based
70	3-Aminomethyl pyridine	[3731-52-0]	C-Pyridin-3-yl-methylamine	C6H8N2	Nicotinyl alcohol; Picotamide	Acetamiprid		Commercial-Campaign Based
71	3-Bromopyridine	[626-55-1]	Beta-Bromopyridine	C5H4BrN	Abiraterone			Commercial-Campaign Based
72	5-Methyl nicotinic acid	[3222-49-9]	5-Methyl nicotinic acid	C7H7NO2	Rupatadine			Commercial-Campaign Based
73	Ethyl isonipecotate	[1126-09-6]	Ethyl Piperidine-4-carboxylate	C8H15NO2	Fexofenadine; Maropitant; Azatadine			Commercial-Campaign Based
74	Ethyl Nipecotate	[5006-62-2]	Ethyl Piperidine-3-carboxylate	C8H15NO2	Tipepidine; Tiagabine			Commercial-Campaign Based
75	Picolinic acid	[98-98-6]	Pyridine-2-carboxylic acid	C6H4NO2	Bepotastine; Pirmenol; Rimiterol; Sorafenib; Piberaline fumarate			Commercial-Campaign Based
76	Piperidine HCl	[6091-44-7]	Piperidine HCl	C5H12ClN	Benproperine; Bietamiverine; Bimoclolmol; Biperiden; Butopiprine; Carpipramine; Clocapramine; Cloperastine			Commercial-Campaign Based
77	Pyridine Hydrochloride	[628-13-7]	Pyridine Hydrochloride	C5H6ClN	Cephalosporins; Cephalaxin			Commercial-Campaign Based
78	Pyridine-3-Acetic Acid	[501-81-5]	3-Pyridylacetic acid	C7H7NO2	Risedronic acid	PyrifenoX		Commercial-Campaign Based
79	2-Methylaminopyridine	[4597-87-9]	N-methylpyridin-2-amine	C6H8N2	New Drug			Scaled in Kilograms Qtys



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 2,100 employees and serves more than 1,400 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.

## MANUFACTURING FACILITIES

### UTTAR PRADESH

- Gajraula

### GUJARAT

- Bharuch
- Samlaya

### MAHARASHTRA

- Nira
- Ambarnath

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