### WELCOME TO OUR RELIANCE RASAYAN PVT.LTD



## RELIANCE RASAYAN PVT. LTD (RRPL)

RELIANCE RASAYAN PVT. LTD (RRPL) are involved in Research & Development and Pharmaceuticals products and Active Pharmaceutical Ingredients (API's), Intermediates, impurities and standards.

We provide Cost effective services and scientific solutions.

We provide Analytical data to support regulatory filing.



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## Introduction

The founding of RELIANCE RASAYAN PVT. LTD (RRPL) in 1988 was triggered to chemical field with a passion. To contribute to the noble field of healthcare in 2016 entered in Pharma field.

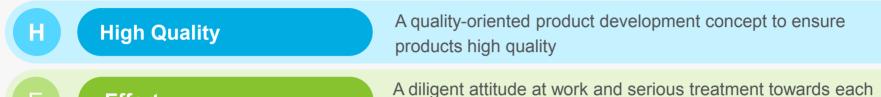
We at RELIANCE RASAYAN PVT. LTD (RRPL) are involved in Research & Development and Pharmaceuticals products and Active Pharmaceutical Ingredients (API's), Intermediates and impurity/impurity standards. We provide Cost effective services and scientific solutions. We provide Analytical data to support regulatory filing.

## Our Vision

To contribute innovation to the pharmaceutical field. Drive the market towards competitive in quality, cost, timelines and lead the way forward for better tomorrow.



## Corporate Values - HEALTH



- E Effort details.
- A fulfilment of social responsibility through creating good EHS environment.
- Leadership

  A high efficient management team to meet the International challenges.
- Technology

  Development of unique and innovative product technology, constant optimization of process.
- H Honesty

  A corporate spirit based on integrity and a focus on true values of the products and services.







### Research & Development

Research and Development is the backbone of the RRPL. Have right mix of experienced, young and enthusiastic research team to find simple and innovative solutions to critical challenges in synthetic chemistry.



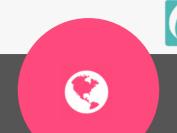


### RRPL basically deal with following

- ✓ Active Pharmaceutical Ingredients (APIs) development as per regulatory requirements.
- ✓ APIs intermediates development as per regulatory requirements.
- ✓ Chemical and fine chemical intermediates.
- ✓ Pharmacopeia Impurities
- ✓ Non-pharmacopeia impurities
- ✓ Phase Transfer Catalyst (PTC)
- ✓ CRO and CMS product development lab to commercial level.











## Impurity isolation and **Structure Interpretation**

- ✓ We isolate maximum pure impurity from mg to g scale.
- ✓ We offer custom synthesis / process isolation of impurity on requests.
- ✓ All impurity is supplied with certificates of analysis (CoA). Standard certificates contain:
  - 1. Purity test by either HPLC or GC.
  - 2. Identification by 1H-NMR and Mass spectroscopy.
  - 3. Other test TGA, 13C NMR, CHN, IR will be on request.
  - 4. Genotoxicity test (AMES test and Comet assay) will be provide on request.

### **Pharmaceuticals products**

✓ We Manufacture pharmaceutical impurities and supply. Our R&D centre offer plethora of services and impurities.

### More then 300 Impurities in Stock and Catalogue of

- 2000 impurities **USP** impurities
- ✓ *Ph.Eur* impurities
- **BP** impurities
- *IP* impurities
- Metabolites impurities















#### R&D Team

PhD - Organic chemistry

MSc - Organic chemistry

MSc - Analytical chemist



#### R&D Infrastructure

- ✓ HPI C
- √ GC
- √ Karl Fischer
- √ pH meter
- ✓ Melting point apparatus
- ✓ 1 L Autoclave
- ✓ 5-10 L Glass assembly
- ✓ All Glassware for R&D
- √ 100 L Glass assembly

#### **Scientific Tools**

✓ Sci-Finder search











## **Chemistry Expertise**



#### Chemistry expertise

- Alkylation
- Asymmetric catalytic hydrogenation
- Asymmetric ketone reduction
- Boronic acid chemistry
- Bromination
- Catalytic hydrogenation
- · Chemical resolution
- Chlorination
- Chiral synthesis
- Condensation
- Cyanidation



#### Chemistry expertise

- Diazotization
- Fluorination
- Friedel-Crafts
- Grignard reaction
- Halogenation (Br, F, I, Cl)
- Heterocyclic ring formation\
- Hoffman rearrangement
- Indole synthesis
- Isocyanate synthesis
- · Michael addition

#### Chemistry expertise

- Nitration
- Oxidation
- · Phase transfer
- Pyridine chemistry
- Pyrimidine synthesis
- Reductions BH3
- NaBH4, DIBAL
- Ring Close
- Suzuki coupling
- Swern oxidation
- Vilsmeier reaction
- · Wittig reaction





## Executed Projects

| Product Name  | Product Segment               |
|---|-------------------------------|
| Norfloxacin   | Antibacterial                 |
| 5-Methyl-2-[(2-nitrophenyl)amino]thiophene-<br>3-carbonitrile (CAS No: 138564-59-7) | Olanzapine intermediates      |
| Ethyl triphenyl phosphonium bromide (CAS No: 1530-32-1)                             | Phase transfer Catalyst (PTC) |
| Benzyltrimethylammonium chloride (CAS No: 56-93-9)                                  | Phase transfer Catalyst (PTC) |
| Methyltriphenylphosphonium chloride CAS<br>Number (CAS No: 1031-15-8 )              | Phase transfer Catalyst (PTC) |
| 4,6-Dichloro-5-(2-methoxyphenoxy)-2,2'-bipyrimidine. (CAS No: 150728-13-5)          | Bosentan intermediate         |
| 5-Chloro-2-thiophenecarboxylic Acid (CAS No: 24065-33-6)                            | Rivaroxaban<br>intermediate   |

# Under development Projects

| Product Name   | Product Segment           |
|--|---------------------------|
| Levetiracetam (API)  | Anti-epileptic drug       |
| 1-(3-Methoxypropyl)-4-piperidinamine (CAS No: 179474-79-4)                       | Prucalopride intermediate |
| 4-Amino-5-chloro-2,3-dihydrobenzofuran-7-carboxylic Acid, (CAS No : 123654-26-2) | Prucalopride intermediate |





## **Our Clients**









Reliance Rasayan Private Limited (RRPL)

PLOT No 15-J, PHASE III, G.I.D.C, NARODA AHMEDABAD GUJARAT 382330, INDIA

Mail: contact@rrplpharma.com
Phone: +91-79-29701875,
www.rrplpharma.com









- ✓ Active Pharmaceutical Ingredients (API)
- ✓ Pharmaceutical Advanced Intermediates
- ✓ Process Development, Optimization
- ✓ Contract Research

- √ Custom Synthesis
- √ Large scale Column chromatography
- √ Impurity synthesis and characterizations
- ✓ Analytical development

BE A PART OF
RELIANCE RASAYAN
AND
HELP US IN BUILDING
A NEW YOU

Thank You

