



A Full Service Offering

to speed up time from small-scale to commercial production



➤ Route Identification

► Chemical Development ► Kilolab ► Pilot Plant ► Flawless Upscaling/Full-Scale Manufacturing

Solvias and RohnerChem -A Powerful Combination of Resources, Expertise and Technologies

- Reduced time to commercialization
- HTS for fast and cost-effective development (Solvias)
- Consideration of upscaling requirements from early phases onwards
- One overall project manager (Solvias or RohnerChem)
- Non-GMP and GMP manufacturing

Catalysis and Ligands

- CX-couplings
- Carbonylations
- Hydrogenations
- Hydroformylations
- > 600 ligands and catalysts to choose from
- HTS (high-throughput screening)

Biocatalysis

- Large enzyme library
- ADH, esterases
- HTS

Hazardous Chemistry

- · CO
- H₂S and thiols
- Cyanides
- H₂ (high pressure)
- Hydrazine chemistry
- Fluorination chemistry

Polymorphism, Salts & Crystallization

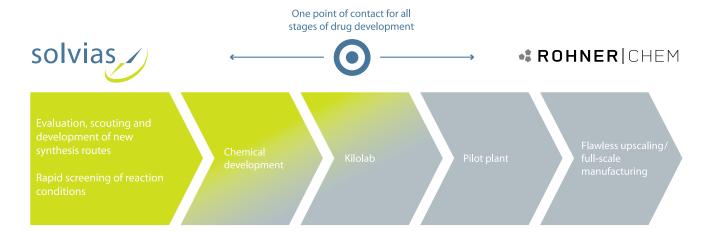
- An integrated approach to solid-state development
- Racemate solutions
- Polymorph identification and process development
- HTS

RohnerChem - Swiss Reliabilty in Development and Manufacturing

RohnerChem is located in Pratteln close to Basel, Switzerland. The company has been established in 1906. We develop and manufacture a wide range of complex organic chemicals, advanced intermediates and APIs. The plant consists of one R&D center, a pilot plant and two production buildings with a total reactor volume of more than $150 \, \text{m}^3$. Our pilot and production plants operate at a temperature range of -90 to 200 °C and a pressure range of 0.02 to 64 bar. Available reactors ($50 \, \text{L} - 10,000 \, \text{L}$) are stainless steel, hastelloy, Inconel 686 and glass-lined. RohnerChem is focused on rapid development and flawless upscaling of fine chemicals and APIs in close cooperation with its customers. Over the last decade, more than CHF 100 million have been invested into the company, enabling us to offer truly state-of-theart equipment, capabilities and services, from the initial development quantities up to hundreds of mtons.

Our Core Technologies and Services

- Organometallic and cryogenic chemistry
- API manufacturing (FDA, Swissmedic)
- · Transition-metal catalysis
- · Rapid process development, flawless upscaling, and economy of scale-production
- High-pressure hydrogenations and carbonylations
- Solid handling
- · Hydrazine chemistry and heterocycles
- · Functional polymers
- · Hazardous and malodorous reagents and reactions



Solvias - Integrated Chemical and Analytical Development

Solvias is an entirely independent and privately owned company located in Basel, Switzerland. The teamwork and cooperation of more than 280 highly qualified employees lead to successful chemical and analytical development projects.

State-of-the-Art Manufacturing Infrastructure

- Multi-purpose reactors from 30 100 L scale (-70 °C up to 350 °C), non-GMP and cGMP
- Multiple autoclaves up to 300 bar (0.05 to 50 L)
- Reactor materials ranging from glass, glass-lined steel, stainless steel, PTFE, tantalum and monel to hastelloy B and C
- Chromatography for up to 20 kg of separation material

Integrated Chemical and Analytical Development

- · Process research and development
- Salt and co-crystal screening
- · Process optimization
- Reference substance supply
- Polymorph screening
- Manufacturing of
 - Tox material (non-GMP/cGMP)
 - cGMP starting materials
 - APIs for clinical phase
- Method development and validation (ICH)
- · Analytical characterization
- Reference standard qualification
- Extractables/leachables
- · Quality control analysis
- Stability studies

Available Technology

- Asymmetric homogeneous catalysis
- CX-coupling
- Chiral ligands (more than 600 chiral ligands and catalysts)
- Biocatalysis
- Fluorination chemistry (HF, SF₄, F₂)
- Hazardous and high-pressure chemistry

Quality

The company's laboratories have been successfully inspected by more than 300 customers, the Swiss authorities (Swissmedic) and the FDA