ABOUT US

Founded in 1993, ChemTrace provides state-of-the-art analytical services and problem solving expertise to improve current technologies in semiconductor, solar, LED and photonics manufacturing. We understand the needs of our customers and create a customized approach to problem solving analytical solutions.

Our clients’ needs are fulfilled by the combined experience of our highly qualified chemists, engineers, and technologists. Our personnel interacts closely and regularly with quality engineers, process engineers, equipment engineers, micro-contamination engineers, internal laboratory staff, facility engineers, field operations, R&D staff, chemists, and physicists to provide accurate and reliable information on the composition, characterization and trace level impurities of samples sent to our laboratory for analysis.

ChemTrace continuously improves upon it’s technology and analytical testing methodology to set the standard in our industry and to improve our test results.
Our customers’ satisfaction is our most important goal. Seamless communication and feedback are the tools we utilize to accomplish this.
Clients benefit from the highly qualified professional staff of chemists, engineers and technologists at ChemTrace. The primary lab staff consists of mainly Ph.D. level chemists.
QUALITY ASSURANCE

ChemTrace is committed to excellence in all aspects of our operations: Advanced analytical techniques, state-of-the-art instrumentation, industry standard quality policy and procedures, extensive training and certification, including continuous research and development. ChemTrace laboratories are accredited by A2LA to ISO/IEC 17025:2005. Unlike the ISO 9000 registration system, ISO 17025 has rigorous requirements that require test methods to be validated prior to accreditation. A comprehensive document control system, daily instrument calibrations, and environmental monitoring are critical requirements of our high quality system. The accuracy and precision of our analyses are ensured through the use of NIST standards, internal standards, blank controls, and duplicate measurements.

RESEARCH & DEVELOPMENT

To stay ahead of our competition, ChemTrace has ongoing R&D programs in the areas of new sampling techniques, reduction of method detection limits, novel analytical methods, new instrumentation, sample preparation enhancement, devices for contamination monitoring, and custom method development tailored for specific application requirements.
WHY CHOOSE CHEMTRACE?

- ChemTrace has over 2 decades worth of experience in supporting the most stringent testing requirements in the semiconductor industry to testing of medical devices for trace metals leaching.
- Strict quality control protocols have been developed and are observed to ensure highest quality of results.
- Samples are handled and analyzed in high-quality cleanrooms.
- Extraction vessels are pre-cleaned and pre-qualified to ensure low background and no cross contamination.
- Accuracy of results is verified through spike recoveries.

ChemTrace believes that analytical data and testing services are only as good as the quality that is built-in to the system.
Experience
Quality
Accuracy
Competency
LOGISTICS SUPPORT

Through our network of state-of-the-art facilities throughout the US, Europe and Asia, ChemTrace extends support for on-site collection of water, chemicals, cleanroom air & compressed inert gas and transport of collected samples to a ChemTrace lab for analysis. We also offer swab kits for in-situ collection of trace metals contamination on tool components.

SAMPLING APPARATUS AND KITS

Since the sample collection is one of the most critical steps in the analytical testing process, we provide clean sampling apparatus and kits.

1. Clean Bottles and Spoons
2. ChemTrace Ultra High Purity Sampling System (Bellows Bottles and Sampling Tubes)
3. MR 3000 – Cleanroom Air Samplers
4. Inert Gas Samplers
5. ChemTrace Swab Kits

Customer deliveries, pick-ups and sampling services can be provided upon special request. We can utilize your lab or our portable lab.
MICRO-CONTAMINATION ANALYSIS

Metallics
- ICP-MS
- ICP-AES

Organics
- FT-IR
- UV
- Vis
- TOC
- GC
- Thermal Desorber
- GC-MS

Ionics
- Ion Chromatography
- Ion Selective Electrode

Particles
- SEM EDX
- Batch LPC
- In-line LPC

OTHER CAPABILITIES
- Karl Fischer Titration
- Acids and Bases Titration Assay
- Organic Solvent Assay by GC
- RAE
- RAI
SEMICONDUCTOR INDUSTRY

Chemicals
- Cleaning Chemicals
- Precursors
- Slurries
- Spin on Chemicals
- Photoresists
- Stripers
- Plating Solutions
- Nano Particles
- Silicon Inks

Water
- Raw Water
- Ultrapure Water
- Reclaimed Water
- Process Water

Cleanroom Materials
- Wafer Cassettes
- Wafer Wand Tips
- Paints
- Gloves, Wipes, Swabs
- Packaging Materials
- Filter Media
- Sealants, Adhesives
- Fire Retardants

Airborne Molecular Contamination
- Cleanroom Air
- Gas Line
- Chamber Environment

Tool Components
- New Parts
- Refurbished Parts
- Cleaned Parts

Wafers
- Virgin Wafer
- Reclaimed Wafer
- Processed Wafer from Deposition, Removal, Modification and Chamber Qualification

PHOTOVOLTAIC INDUSTRY

Substrate Making
- CHEMICALS
- POLYSILICON/SILICON
- CRUCIBLES
- TCS
- Silicon Tetrachloride
- Feedstock
- Melts, Chunks, Crushes

Wafering
- CHEMICALS
- WATER
- WAFER HOLDER AND HANDLING EQUIPMENT

Cell Manufacturing
- TEXTURING
- DEPOSITIONS
- Silicon Nitride
- Silicon Dioxide
- Silicon
GLOBAL SERVICE - ADVANCED FACILITIES

ChemTrace provides analytical services through a network of commercial testing laboratories and precision cleaning facilities located around the globe. All ChemTrace testing laboratories operate in cleanrooms and utilize class 100 or better mini environments to ensure contamination-free preparation and testing of high purity samples.

USA
> Fremont, California > San Jose, California > Portland, Oregon > Hillsboro, Oregon
> Phoenix, Arizona > Carrollton, Texas > Scarborough, Maine
> Colorado Springs, Colorado > Quakertown, Pennsylvania

EUROPE
> Ireland > Fife, Scotland

ASIA
> Singapore > Hsinchu, Taiwan > Tainan, Taiwan > Pyeongtaek-si gyeonggi-do, Korea
> Xi’an, China

MIDDLE EAST
> Kiryat Gat, Israel

www.ChemTrace.com