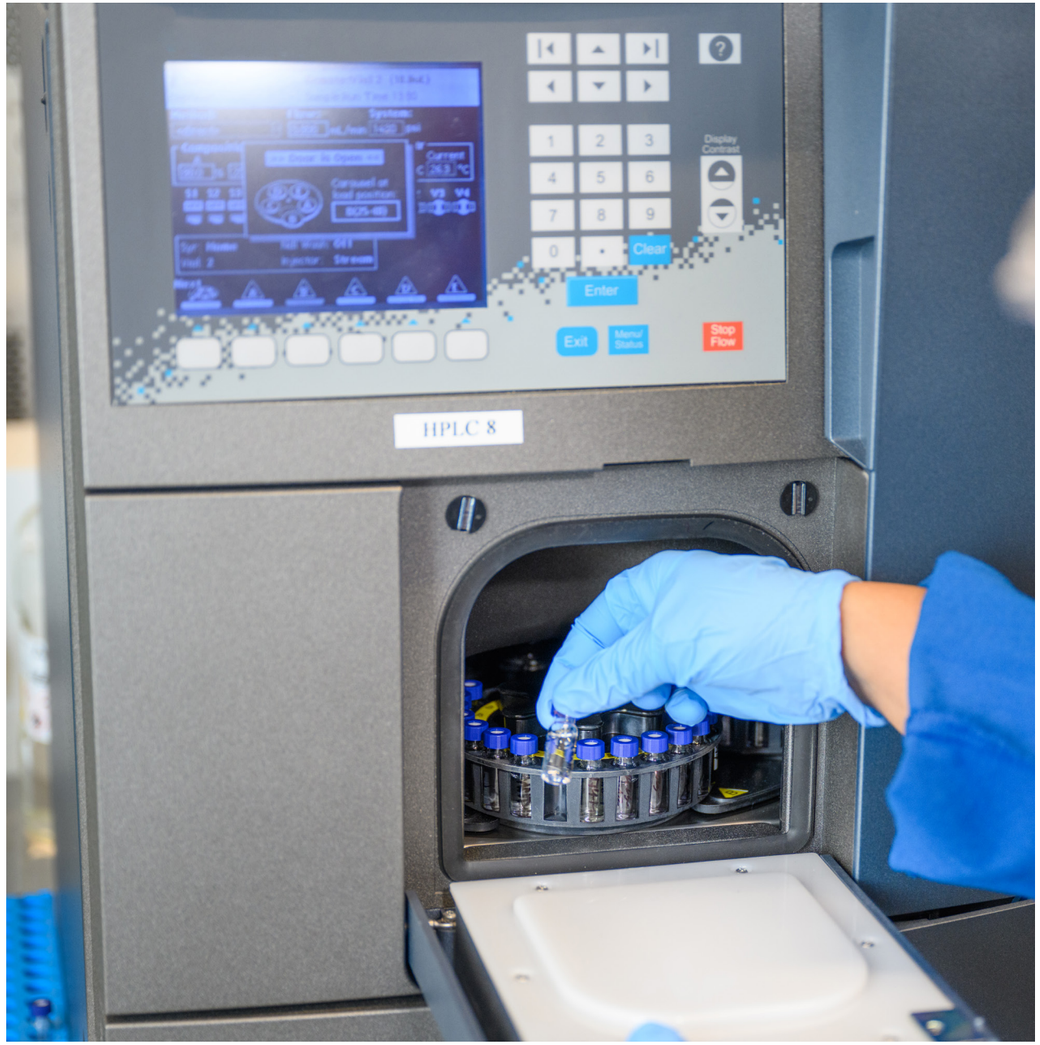
Research chemicals and analytical standards for innovative research and analysis

Science for a Safer World

The widest range of research chemicals and analytical standards

Welcome to this overview of TRC's extensive portfolio of research chemicals and analytical standards, showcasing our expertise in manufacturing high-quality products that support critical applications across disciplines including: life sciences, drug discovery, pharmaceutical quality control, clinical and forensic testing, food safety, environmental analysis, and industrial testing.

Since joining LGC Standards in 2019, we have expanded our capabilities with a state-of-the-art, 200,000-squarefoot Toronto-based facility completed in 2024 – allowing us to develop more innovative compounds, expand our catalogue and custom capabilities, and streamline operations for faster delivery.



Why choose TRC?

We provide 100,000+ research chemicals and analytical standards, from bioactive molecules to stable isotope labelled standards

We're able to manufacture both small and large orders, depending on your needs

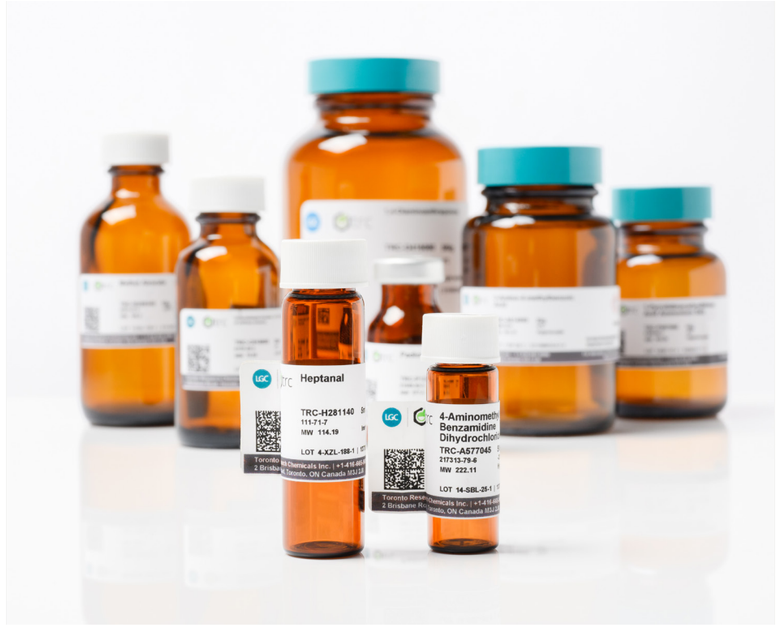
Our experienced technical team can turn your concepts into reality

We offer an inventory of more than 50,000 products at competitive prices

Our customer support teams provide a first-class service with expert technical support

We're experts in worldwide shipping – including special import licences and dangerous goods

A market leader in stable isotope labelled compounds



With a combined portfolio of over 20,000 compounds – including API standards, metabolites, impurities, biomarkers, and standards for food and environmental analysis – LGC Standards companies TRC and CDN Isotopes are market leaders in the development of stable isotope labelled compounds (SILs).

For more than four decades, we have refined our expertise in designing and manufacturing high-purity compounds with carefully selected and strategically positioned labels – including D, C13, N15, O18, and multi-labelled compounds – to ensure reliable analysis in complex matrices. These include serum, plasma, urine, and tissue homogenates for research, pharmaceutical, medical, and forensic applications, as well as soil, food, water, products/materials and air for food and environmental testing.

“If it can be made, we will make it”

– TRC founder, David Dime

We specialise in producing complex organic small molecules that are not otherwise commercially available.

Over the past four decades we have developed an extensive catalogue,with a significant inventory for immediate shipment. Where a compound is unavailable on the market, our project planning team of experienced chemists will design optimal synthetic routes for both new and known compounds.

Your three-step custom synthesis solution

Need help with a project?
Our chemists are ready for the challenge – speak with an expert today.

Life science research and drug discovery

Our extensive range of high-quality research chemicals provides essential tools for identifying molecular mechanisms of disease, and exploring new opportunities for therapeutic intervention. By targeting critical pathways and drug targets, our products drive innovative research in multiple disciplines.

DRUG TARGETS

- GPCRs
- Enzymes
- Ion channels
- Nuclear receptors
- Transporters

THERAPUTIC AREAS

- Neuroscience
- Cancer research
- Infectious disease
- Cardiovascular research
- The microbiome

From target identification and validation to high-throughput screening, formulation development, pharmacokinetics, and drug safety, our compounds support every stage of the drug development process – helping scientists to achieve more reliable outcomes and reduce rates of attrition.

- API standards, analogues, metabolites
- Bioactive molecules
- Impurities and excipients
- Pathway inhibitors
- Chemical probes
- Building blocks and fragments
- Biomarkers of toxicity, drug-drug interaction and disease
- Metabolic probes (APIs and substrates)
- Stable isotope labelled standards

Pharmaceutical quality control and method development

With advancing technology and an evolving regulatory landscape, laboratories are under increasing pressure to meet higher analytical standards to safeguard product quality. From trace-level detection of pharmaceutical contaminants like nitrosamines to identifying novel degradants and process impurities, reliable analytical standards are key to ensuring confidence in testing.

Whether it's ensuring accurate peak identification, verifying system suitability, or conducting semi-quantitative upper limit assessments, we provide the essential tools scientists need to meet the demands of modern pharmaceutical quality control and method development.

- API standards, metabolites, excipient standards and excipient related impurities
- Impurities; process impurities and degradation products
- Nitrosamine small molecule and drug substance related impurities (NDSRIs)
- Extractables and leachables
- Stable isotope labelled standards

Clinical and forensics

Our analytical standards – including thousands of native and stable isotope labelled drug standards and endogenous compounds – don't just provide essential support for routine testing. They also address critical challenges in the development of sensitive and robust methods for detecting and analysing drugs, biomarkers, and toxins in biological matrices such as blood, plasma, and urine.

They enable reliable detection of clinical biomarkers linked to toxicology, drug-drug interactions, and therapeutic efficacy, while also facilitating the identification of toxic, banned, or restricted substances – including drugs of abuse and performance enhancing compounds.

- API standards, metabolites and impurities
- Metabolic probes (APIs and substrates)
- Clinical biomarkers
- Antiepileptics
- Antipsychotics
- Antibiotics
- Anticancer drugs
- Stable isotope labelled standards
- New Psychoactive Substances
- Sports drugs and steroids
- Cannabinoids
- Smoking-related substances
- Opiates and opioids
- Benzodiazepines
- Cocaine and related materials
- Hallucinogens

Food and environmental research and analysis

Our comprehensive range of food and environmental research chemicals and analytical standards has evolved to address changing regulations and emerging technologies, keeping pace with advancing trends in food and environmental research.

We support regulatory compliance and the reliable detection and analysis of diverse food and environmental chemicals in complex matrices, including food products, soil, air and water.

- Pesticides and metabolites
- Food contaminants
- Pharma/vet compounds and metabolites
- PCBs and related compounds
- Polycyclic aromatic hydrocarbons (PAHs)
- Stable isotope labelled standards
- Food Contact Materials
- Perfluoroalkylated substances (PFAS)
- Mycotoxins
- Dioxins and furans
- Volatile organic compounds (VOCs)
- Phytochemicals

Industrial

Our extensive portfolio of research chemicals and analytical standards supports scientists in testing, developing, and optimising materials for cutting-edge technologies and everyday products. From personal care formulations to advanced polymeric materials, adhesives, coatings, and next-generation batteries, we provide solutions tailored to industrial applications.

TRC Capabilities

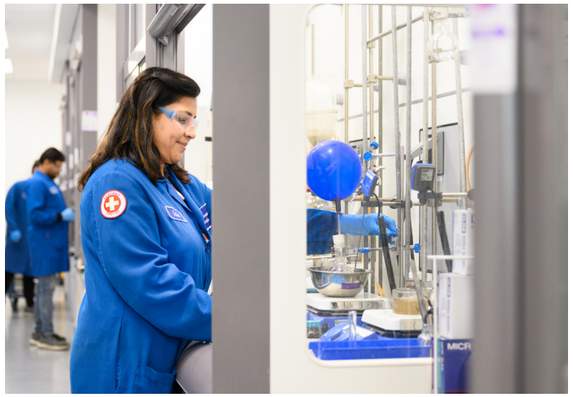
Location:
101 Milani Blvd.,
Vaughan,
Ontario

Facility:
TRC's state-of-the art facility, completed in 2024, spans over 200,000 square feet (sq ft), including:

53,000
sq ft of production laboratories

10,000
sq ft of analytical labs

12,000
sq ft allocated for finished goods



Fostering innovation and collaboration:
Our modern facility attracts top talent, including over 100 PhD- and MSc-qualified scientists, fostering teamwork and creativity to drive innovation.

Efficient operations for faster service:
A streamlined layout and unified workspace improve efficiency, enabling faster delivery times.

Sustainable innovation and superior service:
By integrating green chemistry, advanced technologies, and sustainable practices – including energy-efficient lighting and high-performance glazing – we conserve resources and reduce emissions.

Wider range with more in stock products:
A larger facility and advanced equipment allow us to expand our 100,000+ portfolio and 50,000+ inventory, accelerating development to meet diverse customer needs.

Improved compliance capabilities:
With expanded capacity for managing Health Canada-controlled substances, we can accommodate larger orders with greater flexibility.

TRC's Portfolio: key features and benefits

100,000+ products
Search for the product you need on our user friendly platform.

Global logistics
Timely and compliant services, with international delivery.

Detailed COAs
Demonstrating high purity and support for a wide range of applications.

Multi-pack sizes
Offering various sizes to meet your individual requirements.

Scientific excellence
100+ PhD- and MSc-qualified scientists developing our products.

Custom synthesis
Cost-effective service, manufacturing new compounds for specific customer needs.

Flexible order quantities
From just 10mg, enabling you to order new products cost-effectively.

Customer care
Delivering tailored information, technical support, and assistance.

Diverse range
Providing you with a complete portfolio of frequently used and unique research chemicals.

Science for a Safer World

Contact us today
Speak with an LGC expert today