CHEMICAL & MATERIAL TESTING FOR SUSTAINABILITY
Why conduct chemical & material testing?

When it comes to chemicals and materials, Intertek is your total quality assurance provider.

Chemical and material analysis can be very important to understanding, measuring, and demonstrating the sustainability of the components of nearly any physical system. Intertek has the capability and the experience to provide both custom measurements designed specifically for a customer, or standard, broadly accepted measurements. These measurements can be done independently to answer specific questions, or in collaboration with any of the assurance, inspection, auditing, and certification services provided by Intertek.

Features
With a growing emphasis on environmental and human health impacts of materials and products, manufacturers, retailers and suppliers are optimizing transparency, monitoring their chemical footprint and considering sustainability in design. Chemical and material analysis can be applied to a very wide range of materials and products. These measurements can address an extensive scope of chemistry, formulation, and product strategies in nearly any market. Some examples of different scopes are to detect, identify and quantify different chemicals of concern:
- Toxic Metals
- Substances of Very High Concern (CVHC)
- Volatile Organic Compound (VOC) content and emissions
- Environmental Compounds of Concern
- Formaldehyde (and other aldehydes)

Collaborate with Intertek’s Health, Environmental, Regulatory, and Safety (HERS) consultants to evaluate the degree of toxicity of the chemicals identified and quantified in a wide variety of analyses. Testing and analysis can support customers to determine hazard level, meet disclosure and regulatory requirements, assess important design considerations and optimize formulations to meet broader sustainability objectives.

Our chemical and material testing experts can develop custom analyses designed to identify specific chemicals of concern, supply chain issues, and proprietary products. Our team will work closely with you to both identify the question and determine the best measurement to obtain the needed data.
Examples of different materials that may require analysis:

- Polymers, plastics, packaging
- Building & construction
- Additives
- Contaminants
- Residues
- Organic chemistry
- Inorganic chemistry
- Adhesives
- Coatings
- Surfactants

**Testing Scope**

There are a variety of frameworks, standards and mechanisms where chemical and material testing will support your sustainability goals. Some examples of these in differing capacities, may include:

- Verification of the material composition of customer products and the materials they purchase to develop these products are important for chemical transparency and disclosure initiatives. The need for verification services may be for; Ingredient lists, bulk composition, trace composition and data to support paper audits.
- Verification of the chemicals and materials involved in the supply chain used to produce customer products. This could be used to compare suppliers to specifications and/or compare multiple suppliers of the same material.
- Probing any hazardous reactions that may occur during production, or post-production products that may encounter unusual conditions, such as high temperature, leak, or spill. Examples include; thermal hazards, decomposition analysis, and material disposal options.
- Helping explore different material disposal options to seek lower impact on the environment, such as; neutralization of waste materials, possible reactions in the waste streams, and assay recycled materials to obtain data about chemical composition.
- Product authenticity measurements to ensure that product claims can be verified for counterfeit products and/or natural vs synthetic options.

**Benefits**

- Solid analytical data can help you make informed decisions about the choices you face in product design, manufacturing, and product usage.
- Stay competitive with data that enables more sustainable choices.
- Support to comply with broader sustainability mechanisms and standards, such a Leadership in Energy and Environmental Design (LEED®), WELL Building Standard, Chemical Footprinting Project, Health Product Declarations®, market access and regulatory requirement among others.

**About Intertek**

Intertek is a leading Total Quality Assurance provider to industries worldwide. Our network of more than 1,000 laboratories and offices and over 43,000 people in more than 100 countries delivers innovative and bespoke Assurance, Testing, Inspection and Certification solutions for our customers’ operations and supply chains. Intertek Total Quality Assurance expertise, delivered consistently, with precision, pace and passion, enabling our customers to power ahead safely.