Composition Analysis

Composition analysis enables us to identify or quantify the concentration of a substance, multiple substances or unknown substances in a sample by utilising separation and analytical methods, which gives us a full picture of the sample.

Why Should We Do Composition Analysis?

■ **Failure Analysis.** Understanding the composition of products helps us to know the underlying issues of defective products for improvement.

■ **Deformulation.** It is a good approach to learn about the formulation of new products.

■ **R&D and Continuous Improvement.** Comparing the composition of our products with that from a potential competitor or new vendor of the product provides support for R&D and continuous improvement.

Our Services

■ **Unknown Chemicals**
(raw materials/ intermediates/products)

Organic: hydrocarbons; alcohols, phenols, carboxylic acids, esters; aldehydes, ketones, quinones; halogenated compounds; heterocyclic compounds; aromatics; amino acids; proteins, nucleic acids

Inorganic: inorganic salts/ acids/ alkalis, oxides; elements

■ **Unknown Solids /Liquids /Powders /Particles /Creams**

Unknown substances in life or production, involving chemicals, food, drugs, auxiliaries; additives, cosmetics, fragrances, plastic granules, pigments

■ **Unknown Foreign Substances and Impurities**

Embedded foreign substances or irregular spots of electronics products; surface contaminants, leachables, oily/misty substances; plastics frost; yellowing and blacking of industrial products; chemical impurities and byproducts

■ **Unknown Ores**

Analysis of full ingredients in ores, such as nonferrous metal ores including tin ores, lead concentrates, bauxites, molybdenum ores, antimony ores, zinc ores and copper concentrates; ferrous metal ores ferromanganese ores.

Industries/Products

Polymers (rubber, plastics), auxiliaries, organic solvents, inks, coatings, cleansers, surface treating agents, metal processing liquid, adhesives, water treatment agents, petrochemical, inorganic materials...

About Us

Knowing the cutting-edge technology to analyse unknown substances and boasting the most authoritative data for spectrum analysis, a group of technical R&D specialists from C&K Testing (95% master's degree or above) have rich expertise in technical support and product R&D, undertake projects at national, provincial or municipal levels for years and render technical support for many Top 500 companies. C&K Testing offers a wide range of services including composition analysis, deformulation, analysis of unknown substances and failure analysis. We are a good helper in the R&D of new products, product upgrading, technical improvement, quality control, failure analysis and cost control.

Our advanced instrumentation:

- **Organic analysis:** Gas Chromatography-Mass Spectrometry (GC-MS), Liquid Chromatograph Mass Spectrometer (LC-MS), Nuclear Magnetic Resonance Spectrometer (NMRS), FT-IR Spectrometer (FTIR), Gel Permeation Chromatograph (GPC)
- **Inorganic analysis:** Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES), Inductively Coupled Plasma Mass Spectrometry (ICP-MS), Atomic Absorption Spectroscopy (AAS), Atomic Fluorescence Spectroscopy (AFS), Ion Chromatography, X-Ray fluorescence spectroscopy (XRF).


One-stop Services


Free Consulting


Reliable Data


Low Test Charge


Short Test Duration

Contact Us

Hangzhou

Add: 1/F, No.4 Building, Huaye Hi-Tech Industrial Park, No.1180, Bin'an Road, Binjiang District, Hangzhou, Zhejiang, China

Tel: +86-571-87206587 Fax: +86-571-89900719

Email: test@cirs-group.com

Nanjing

Add: 2/F, Guangde Commercial Center, No. 158, Fangshui Road, Chemical Industrial Park, Nanjing, Jiangsu, China

Tel: +86-25-58390409

Email: shg@cirs-group.com

Ireland

Add: Unit 1 Ardee Business Park, Hale Street, Ardee, Co. Louth, Ireland

Tel: +353-41-9806916 Fax: +353-41-9806999

Email: louise@cirs.ie

Beijing

Add: 9/F, Zhongyu Century, No. 31 Lianhuachi Road (E.), Haidian District, Beijing, China

Tel: +86-010-63984062; +86-010-63984032

Fax: +86-010-63984032

Email: test@cirs-group.com