

Thermo Scientific Product Snapshot



TruScan and TruScan RM

The TruScan analyzer is designed to meet the specific needs of the pharmaceutical industry, enabling identity testing of chemicals directly at the point of need, thus reducing time and costs associated with raw material inspection. The TruScan RM analyzer is the company's next generation Raman-based spectrometer featuring significant advancements in speed and ease of use, in a more compact form factor.

- Raman spectroscopy
- Pharmaceutical, nutraceutical and consumer health
- Compliant with relevant U.S. FDA guidelines and easily implemented in GMP environments



microPHAZIR

The microPHAZIR analyzer is a lightweight, handheld point-and-shoot instrument based on Near-Infrared (NIR) spectroscopy. The analyzer allows users to quickly screen and identify pharmaceutical and nutraceutical raw materials, industrial chemicals and more.

- NIR spectroscopy
- microPHAZIR AS – Asbestos screening
- microPHAZIR GP – General purpose NIR spectrometer
- microPHAZIR PC – Plastics and carpet recycling
- microPHAZIR RX – Pharmaceutical and consumer health
- Simple point-and-shoot design

Thermo Scientific Portable Optical Analyzers

Material Identification Solutions for
Good Manufacturing Practice (GMP) Environments

Product Line Overview



Pharmaceutical Raw
Material Identification



Nutraceutical Raw
Material Identification



Packaging Raw
Material Identification



Anti-Counterfeit



Pharmaceutical Raw Material Identification

Raw material testing and identity verification are critical steps in the quality control process with tremendous impact on customer safety as well as speed and cost of production. With increasing regulatory pressures and the drive toward lean manufacturing, it is now more critical than ever to implement efficient ways to perform accurate incoming raw material identification.

With Thermo Scientific TruScan and TruScan RM analyzers, based on Raman spectroscopy, and the microPHAZIR RX, based on Near-Infrared (NIR) spectrometry, pharmaceutical and nutraceutical manufacturers can conduct rapid raw material identification at the point of receipt within seconds. Easily operated by non-technical staff, the analyzers perform non-destructive analysis and can operate through plastic or glass containers to enable immediate release of raw materials into production. Each support 21 CFR part 11 compliance and are consistent with USP and EP regulations.

Nutraceutical Raw Material Identification

With increasing consumer concerns about the quality, strength and label claims of active ingredients in dietary supplements, the FDA has implemented tighter controls on manufacturing practices. As a result, global nutraceutical manufacturers are seeking technology that will allow them to perform accurate incoming raw material inspection to ensure the quality and strength of finished products.

The TruScan® and TruScan RM analyzers, based on Raman spectroscopy, and the microPHAZIR™ RX, based on Near-Infrared (NIR) spectrometry, enable fast, accurate material identity verification - typically within seconds - with ease and convenience. These cost-effective solutions are well suited to identify amino acid, most vitamins, and many other raw materials commonly used in dietary supplement manufacturing. Additionally, TruScan® and microPHAZIR™ RX were designed to meet the stringent requirements of current good manufacturing practices (cGMP) and are 21 CFR Part 11 compliant.

Packaging Raw Material Identification

Despite frequently going unnoticed by consumers, pharmaceutical packaging is carefully designed to provide protection for drug tablets, pills, capsules, and other dosage forms. In addition to providing protection against physical damage, chemical alteration through natural degradation, and environmental contamination, packaging plays an important role in offering evidence of temperature control in the supply chain and product sterility. According to the Code of Federal Regulations for pharmaceutical product packaging, components used to temporarily or permanently store drug products such as blisters, films, plastic containers, or vials, must be identified before use by Quality Control (see 21 CFR Part 211.84). This is similar to how raw materials are used in the composition of the drug product.

Our handheld Raman and NIR analyzers can properly identify the most common polymers be used for the production of finished product packaging in the pharmaceutical and nutraceutical industries.

Anti-Counterfeit

Counterfeit pharmaceuticals represent a deadly and growing worldwide problem. Efforts to combat counterfeit pharmaceuticals to date have largely focused on making the product packaging difficult to copy. However, in many places, drugs are not sold in their original packaging, and counterfeiters have become very adept at imitating even the most sophisticated packaging. One of the most promising approaches to removing counterfeit drugs from the market is authenticating the dosage form of the medication itself to confirm its origin.

Our handheld Raman and NIR spectrometers can help identify and eliminate dangerous counterfeit or substandard products to secure the supply chain and ensure patient safety.