Identification of plastics and polymers is a critical step in the proper sorting and recycling of post-industrial and post-consumer materials. Carpet reclamation and plastic sorting facilities are seeking cost-effective material identification processes that streamline inspection without compromising accuracy.

# Thermo Scientific microPHAZIR PC

**Handheld Carpet Fiber Identification** 









Each year tons of carpet reaches the end of its useful life and, once discarded, often ends up consuming an enormous amount of space in landfills across the country. Increasingly, more of this material is being recovered, recycled, and reused.

To achieve a high quality of reprocessed material, carpet face fibers need to be accurately identified and properly sorted. Identification tools, such as the Thermo Scientific microPHAZIR PC analyzer, enable rapid screening and identification of carpet fibers. The 2.75 lb (1.25 kg) handheld NIR analyzer is completely self-contained and can perform accurate on-site analysis in seconds.

### **Key Benefits Include:**

Save time and increase throughput Handheld design allows users to perform efficient on-site analysis and increase inspection.

#### Easy to use

Designed for non-expert users, the analyzer is fully automated and requires no additional input.

#### Lightweight

Lightweight, 2.75 lb (1.25 kg), ergonomic design eliminates user fatigue.

#### Results in seconds

Trusted results in 1.5 seconds.

#### Clear results

Color-coded LED results provide clear carpet fiber identification.

#### **Perform Identification of:**

- Nylon 6
- Nylon 6-6
- PP
- PET
- Wool
- PPT
- Acrylic
- Rayon



# **Product Specifications**





The microPHAZIR $^{\rm m}$  PC analyzer allows users to quickly sort through and identify carpet fibers in a matter of seconds.



The analyzer comes with our preinstalled carpet identification library and is immediately ready for use.



Color-coded LED results provide clear carpet fiber identification.

## Thermo Scientific microPHAZIR PC

Principle of Operation	Non-destructive chemical analysis via near infrared spectroscopy
Weight	2.75 lb (1.25kg)
Light Source	Tungsten light bulb, safe for operators and sample integrity
Measurement Time	1.5 seconds
Data Download	Data and Applications synchronization via PC USB connection
Security	User selectable password protection with multiple security levels
Batteries	Interchangeable, rechargeable 5+ hours lithium-ion battery pack
	AC battery charger included
	Battery pack recharge time <2 hours. System includes 2 batteries
Housing	High-strength, dust proof/splash proof plastic housing
Calibration	System is shipped with the carpet identification library pre-installed and ready for use

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