

PlasTell

Plastics identification made simple

Plastic manufacturing and waste streams contain numerous types of visually identical but chemically different polymers, meaning that they are nearly impossible to differentiate with the naked eye alone. How can you identify them quickly and easily?

PlasTell is your complete plastics identification solution.

Instant identification. Just put your sample over the sensor and the machine will provide you with an answer in less than 1 second!

All common materials supported. PlasTell supports the 17 most common polymers – see the next page for the list.

Full solution. You are buying a highly integrated plug-and-play machine with everything included – no need to have a PhD in chemistry to analyse the data or buy a spectra library.

Keeps your hands free. Unlike other machines, PlasTell is designed to be placed on a table. This keeps your hands free to manipulate the samples and be able to measure more samples quickly.

Optimised for the task. At Matoha, we don't make spectrometers for 20 different applications. We focus on just 2 applications (fabrics and plastics) and get these done.



Optimised for rapid sorting. The combination of the short measurement time (<1 s) and the colour LED indicator lets your workers sort items very quickly. The LED indicator can be easily configured through our app to show a particular colour for a specific composition (such as green for PET in the photo above).

Cloud included. You can use our Cloud to save measurements and access statistics to gain advanced insights into your processes.

App included. Use our free Android and iOS app to save measurements, access cloud data and configure the machine.

Optimised for stream audits. Thanks to our advanced app, you can save all kinds of additional information (description, colour, photo, composition, etc.) about the samples you have just measured and then export the data in an Excel-compatible format (csv)!

Technical specifications

The instrument uses combined near-infrared transmittance (for translucent samples) and reflectance (for opaque samples) spectroscopy, operating in a band in the 1-2 μm wavelength region.



OLED screen. Provides clear readout of the measurement result.

Two infrared lamps for optimal performance for both transparent and opaque samples.

LED indicator which changes its colour based on the plastic type – enabling quick sorting.

Polymers supported Most common plastics (PET, PVC, PE, PP, PS, PLA, ABS, PC, PA, PMMA, PA, PLA, PU, POM with and limited support for PVDF, PEEK, PAI and PETG. Specialist plastics or polymers can be added upon request.

Please note that PlasTell is unable to identify black/dark plastics containing the carbon black pigment and very thin films ($<20\ \mu\text{m}$).

The accuracy depends on the cleanliness of the samples and correct measurement technique – in our tests $> 95\%$ is achievable.

Measurement time < 1 second

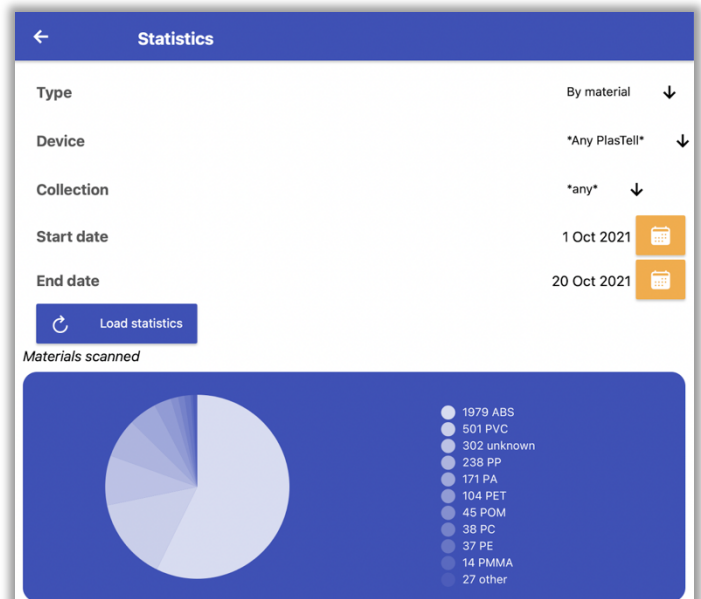
Power supply Typical power consumption 5W. A mains adapter and EU, US, AU and UK connectors are included. Optionally, can be powered from an external battery pack.

Footprint $10\times 13\times 17$ cm, 0.5kg.

Connectivity Wi-Fi (2.4 GHz) for cloud connectivity and device updates, Bluetooth LE to connect to our app.

Warranty One year as standard and 21-day money-back guarantee (conditions apply, for details please see <https://matoha.com/terms>).

Mobile application Our free app for iOS and Android can be used to configure the instrument as well as save data and get advanced statistics and insights. For instance, you can see the materials you have measured in the last month:



To order your PlasTell, please get in touch with our distributor Essential Recycling - info@essentialrecycling.co.uk