

Design for Recycling

with trinamiX Mobile NIR Spectroscopy Solutions



Easily evaluate the NIR detectability of your plastics during the design process with the push of a button. Eliminate guesswork and time-consuming tests on automated sorting lines.

Included features

- ✓ **trinamiX PAL One**
 A robust, mobile NIR spectrometer: accurate and reliable identification of plastics on the spot.
- ✓ **Easy-to-use app**
 Seamlessly navigate through the identification process with our user-friendly app.
- ✓ **Customer portal**
 Manage your data, download reports, and export information effortlessly through our secure customer portal.

Measurement Output Examples



Reliable Identification of the following polymers



White Sample

Reflectivity > 10 %
= sortable

NIR-Black Sample

Reflectivity < 10 %
= not sortable
But sample is NIR detectable as correct polymer type is identified.

Carbon Black Sample

Reflectivity < 10 %
Polymer type cannot be identified.

trinamiX makes the invisible visible

Improving on-the-spot decision-making through NIR spectroscopy

1 Point trinamiX NIR spectrometer to object and press the green button. Near-Infrared light is sent to and reflected by the measured material.

2 Each material has a unique spectrum of wavelengths that is reflected. Chemometric models analyze the spectrum of the reflection and clearly identify the material.



3 Within seconds, a result is displayed in the app, and additional information becomes available for further evaluation in our customer portal.

About trinamiX Mobile NIR Spectroscopy Solution

- Battery capacity: up to 6,000 measurements
- Slightly larger than a smartphone
- Wireless connection to smart device via *Bluetooth®* and customer portal via internet
- Data stored in MS Azure cloud provided by BASF SE
- Data transfer end-to-end encrypted (SSL and AES 256)
- Android, iOS, Windows app
- Customer portal for more insights
- In-house developed chemometric models

About trinamiX

- ✓ At trinamiX, we make advanced NIR technology accessible to people outside a laboratory for a variety of applications across industries, including agriculture, circular economy, chemistry, and food.
- ✓ Our entire production is based in Germany. We are committed to provide highest quality and attention to detail.
- ✓ Data protection is the utmost priority for us. Our highly protected data management ensures our customers a trustworthy data solution.



Watch how it works
trinamiX solution for
mobile plastic sorting

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