

^{13}C ISOTOPE MEASUREMENTS WITH ER RESPIROMETER

ER RESPIROMETER + $\delta^{13}\text{C}$ ISOTOPE ANALYZER

CONNECT $\delta^{13}\text{C}$ ISOTOPE ANALYZER TO ER RESPIROMETER FOR PRECISE
ON-LINE BIODEGRADATION MEASUREMENTS

Features



ER Respirometer



$\delta^{13}\text{C}$ isotope analyzer, e.g. 1



$\delta^{13}\text{C}$ isotope analyzer, e.g. 2

- **MEASURING $\delta^{13}\text{C}$ ISOTOPE ON-LINE;**
- Software integration between analyzers;
- Biodegradation in compost;
- Biodegradation in soil;
- Biodegradation in marine waters;
- Biodegradation in fresh waters;
- Biodegradation in waste waters;
- Biodegradation in sediments;
- Biodegradation in algae environment;
- **Certification** measurements;
- Modular and upgradable;
- Suitable for various applications;
- Customizable.



RESPIROMETERS STANDARDS AND APPLICATIONS

Applications

- Biodegradation in compost;
- Biodegradation in soil;
- Biodegradation in marine waters;
- Biodegradation in fresh waters;
- Biodegradation in waste waters;
- Biodegradation in sediments;
- Biodegradation in activated sludge;
- Biodegradation in algae environment;
- Measuring $\delta^{13}\text{C}$ Isotope ON-LINE;
- Organic waste biodegradation measurements;
- Insects and small animals respirometry;
- Food respiration, R&D in plastics, biotechnology,
- Aerobic and anaerobic conditions;
- And many more.

Standards

- **ISO 14855-1 & ASTM D5338;** Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions;
- **ISO 17556:2019;** Determination of the ultimate aerobic biodegradability of plastic materials in soil by measuring the oxygen demand in a respirometer or the amount of carbon dioxide evolved;
- **ISO 14852:2021;** Determination of the ultimate aerobic biodegradability of plastic materials in an aqueous medium. Method by analysis of evolved carbon dioxide;
- **ISO 16929:2021;** Determination of the degree of disintegration of plastic materials under defined composting conditions in a pilot-scale test;
- **ASTM D6691-17;** Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials in the Marine Environment by a Defined Microbial Consortium or Natural Sea Water Inoculum;
- **OECD 301B;** Biodegradability of the material by evaluating the production of CO_2 over a minimum of 28 days in a liquid environment;
- **ISO 23977, ISO 18830, ISO 19679, ISO 22403, ISO 22404** and many more.

