

ISO 19679:2020 (E)

Plastics — Determination of aerobic biodegradation of non-floating plastic materials in a seawater/sediment interface — Method by analysis of evolved carbon dioxide

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Test environment
6	Reagents
7	Apparatus
8	Procedure
8.1	Test material
8.2	Reference material
8.3	Preparation of the sediment
8.4	Test setup
8.5	Pre-conditioning phase
8.6	Start of the test
8.7	Carbon dioxide measurement
8.8	End of the test
9	Calculation and expression of results
9.1	Calculation
9.1.1	Amount of CO ₂ produced
9.1.1.1	Net CO ₂ produced
9.1.1.2	Ba(OH) ₂ used as CO ₂ absorber
9.1.1.3	KOH used as CO ₂ absorber
9.1.2	Percentage of biodegradation
9.2	Visual inspection
9.3	Expression and interpretation of results
10	Validity of results
11	Test report
Annex A	(informative) Example of respirometric system based on CO ₂ measurement