

# ISO 19679:2016-08 (E)

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

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Principle .....	2
5	Test environment .....	2
6	Reagents .....	2
7	Apparatus .....	3
8	Procedure .....	3
8.1	Test material .....	3
8.2	Reference material .....	4
8.3	Preparation of the sediment .....	4
8.4	Test setup .....	4
8.5	Pre-conditioning phase .....	4
8.6	Start of the test .....	5
8.7	Carbon dioxide measurement .....	5
8.8	End of the test .....	6
9	Calculation and expression of results .....	6
9.1	Calculation .....	6
9.1.1	Amount of CO <sub>2</sub> produced .....	6
9.1.2	Percentage of biodegradation .....	8
9.2	Visual inspection .....	8
9.3	Expression and interpretation of results .....	8
10	Validity of results .....	9
11	Test report .....	9
Annex A (informative) Example of respirometric system based on CO <sub>2</sub> measurement .....		10
Bibliography .....		11